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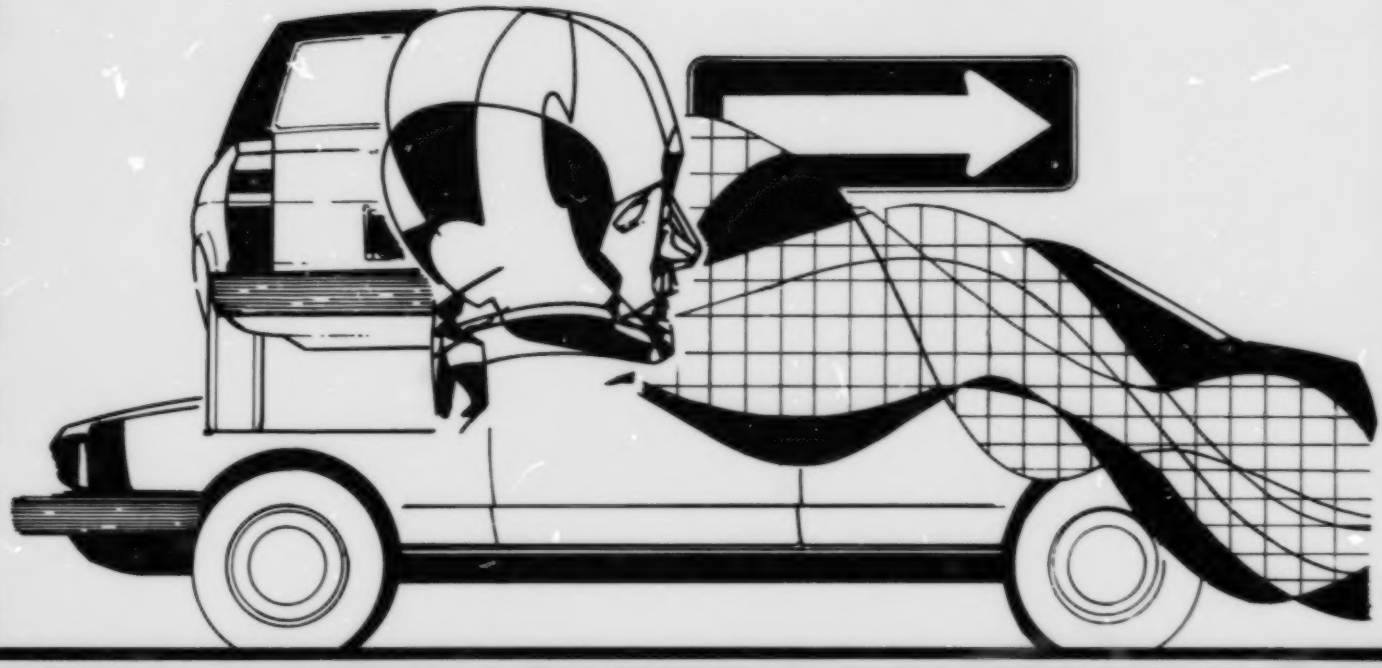
ALCOHOL USE BY PERSONS FATALLY INJURED IN MOTOR VEHICLE ACCIDENTS: 1985



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ALCOHOL USE BY PERSONS FATALLY INJURED IN MOTOR VEHICLE ACCIDENTS: 1985

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17 Abstract

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ABSTRACT

The report briefly describes the conduct of a project to collect and computerize data on alcohol use by persons fatally injured in motor vehicle accidents in seven provinces of Canada, and presents, in numerical tables, an overview of findings from the current and recent years. A key feature of the fatality database is the inclusion of objective toxicological data (from body samples) on alcohol use by victims killed in motor vehicle crashes. The first appendix presents tables showing time trends in the complete data set for the number of fatalities by type of victim, and for automobile drivers only. Alcohol use by BAC ranges is presented for drivers of four categories of vehicles, and for drivers distributed by age, by sex, and by collision type (single vehicle or multiple vehicle). Similar data for each province are displayed in subsequent appendices.

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ABSTRACT

The report briefly describes the conduct of a project to collect and computerize data on alcohol use by persons fatally injured in motor vehicle accidents in eight provinces of Canada. It presents in numerical tabulations an overview of findings from the current and recent years. A key feature of the fatality database is the inclusion of objective data from body samples on alcohol consumption by victims killed in road traffic accidents. The first appendix presents tables showing time trends in the number of fatalities by type of victim, and for drivers only, for the aggregate of the same seven provinces as covered in previous years. Alcohol use by BAC ranges is presented for drivers of four categories of vehicle, and for drivers distributed by age, by sex, and by single versus multiple vehicle collision. Similar tables for each province are displayed in separate appendices, and finally, the same tables for the aggregate of eight provinces (i.e. now including Nova Scotia) are appended as well.

ALCOHOL USE BY PERSONS FATALLY INJURED IN MOTOR VEHICLE ACCIDENTS: 1985

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Publishing of this report is undertaken solely by Transport Canada, and it has been translated and is available in French.

PREFACE

The Traffic Injury Research Foundation of Canada (TIRF) has compiled data on alcohol use by persons fatally injured in motor vehicle accidents since 1974. This most basic and mundane of all research -- data gathering -- has, over time, produced a valuable tool for applied research on the alcohol-(fatal)crash problem: the Fatality Database. At present, case files are complete from 1973 through 1985 for seven provinces (British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick, and Prince Edward Island). For calendar year 1985, data from Nova Scotia have also been obtained. The Fatality Database now contains information on over 50,000 persons fatally injured in motor vehicle accidents.

The Fatality Database evolved to its current form during a series of projects conducted by TIRF in the 1970s. Data for calendar years 1977 through 1982 were gathered under two projects, both jointly sponsored by the Departments of Transport and National Health and Welfare. The Road Safety and Motor Vehicle Regulation Directorate of Transport Canada sponsored TIRF's collection of 1983 data. Our gathering of 1984 and 1985 data was jointly sponsored by the Canadian Conference of Motor Transport Administrators (CCMTA) and Transport Canada. We acknowledge these latter two agencies not only for their past support but also for their continuing commitment to fund the maintenance and extension of the Fatality Database.

Deaths, injuries, and other human and economic losses due to traffic crashes -- whether or not related to alcohol use -- are a social problem that crosses lines traditionally drawn between health, legal, and transportation-safety areas. To obtain data on alcohol use by persons fatally injured in motor vehicle accidents requires extensive interagency cooperation. The projects that created and extended the Fatality Database could not have been done without the cooperation and assistance of many different agencies. During the present project, eighteen agencies in eight provinces participated. In particular, we acknowledge

the generous contributions of coroners, medical examiners, and traffic-safety specialists in provinces now included in the Fatality Database.

We thank all who assisted us in this work.

1.0 INTRODUCTION

This report briefly describes the conduct of the project to collect data on alcohol use by persons fatally injured in motor vehicle accidents in eight Provinces during 1985. The other product of this project is a magnetic tape containing 1985 case files. The case files were designed to maintain continuity with previous years' data and, at the same time, to facilitate their linkage to more complete data on fatal motor vehicle accidents compiled by the Provinces and by Transport Canada. A series of appendices to this report presents selected findings for each Province included in the project as well as seven- and eight-province aggregate statistics.

1.1 Background

Along with the police, coroners and medical examiners investigate the cause and manner of sudden, unexpected deaths, including deaths associated with motor vehicle accidents. Investigations often include toxicologic analyses of body fluids to determine the presence and amount of drugs, especially alcohol. In most provinces, coroners' data on alcohol use among traffic fatalities remain separate from police-reported data on motor vehicle accidents (MVA). Even when these data are combined at the provincial level, information needed to interpret alcohol-test results is not routinely recorded, for example, the elapsed time from crash involvement to death. As in the past, therefore, the primary objective of this project was to ensure that coroners' data on alcohol use by traffic fatalities were linked, meaningfully, to MVA data.

Another purpose of the project was to extend the Fatality Database in a way that maintained continuity with previous years' data. The availability of a continuous set of historical data has renewed importance given recent changes in Criminal Code statutes regarding impaired driving and penalties for these offences. Whether or not changes in Law and intensified enforcement have reduced drinking-driving problems will remain a matter of anecdote and impression in the absence of empirical data. Moreover, to measure progress, baseline data on the magnitude of

problems addressed are very much needed. With the completion of this project, the Fatality Database provides baseline data for seven provinces for 13 years, which, in aggregate, also indicate Canadian trends. Now extended through calendar year 1985, the Fatality Database offers one means of evaluating the impact of recent and on-going efforts to prevent impaired driving and its damaging consequences.

Although the Fatality Database has proven useful in its own right, case files contain a limited set of data on traffic fatalities and on motor vehicle accidents resulting in one or more deaths. Thus, to enhance the value of data unique to the Fatality Database, we now provide information needed to link case files with police-reported data on fatal motor vehicle accidents. These data are routinely compiled by each Province and produced in electronic form. A common set of police-reported data on all motor vehicle accidents resulting in injury or death is maintained by Transport Canada in the Traffic Accident Information Data Bank (TRAID). To ensure unambiguous linking of case files from the Fatality Database with existing crash files -- while still maintaining confidentiality of personal information on traffic victims (e.g., name) -- requires a unique crash identifier and greater specification of the traffic fatality (e.g., police-assigned number of vehicle occupied by the victim, victim's position in vehicle). These data were obtained either from hard-copy accident reports or from electronic files. Our approach to linking coroners' data with police-reported data is described in more detail in the following section.

1.2 Scope of Report

This report has three sections and eleven appendices.

Section 2.0, Design and Conduct of the Project, outlines how the data were gathered and computerized and reports (1) the number of case files established for 1985 and (2) the rates of testing for alcohol.

Section 3.0, An Overview of Findings, briefly discusses selected statistics for 1985 and compares them with data from previous years.

A series of appendices (Appendix A through Appendix J) contains tables of selected data for combined sets of 1985 cases (seven- and eight-province aggregate statistics) and similar tables for each of the eight provinces. In addition, data for other years are included.

Appendix K contains a list of variables that specifies data included in 1985 cases files.

2.0 DESIGN AND CONDUCT OF THE PROJECT

Gathering data on alcohol use by persons fatally injured in motor vehicle accidents involves, above all, linking two or more sources of needed information. In Canada, the process of collecting and computerizing these data has been engaged on a more-or-less annual basis since the mid-1970s. As a result, the methods and procedures have become routine and increasingly more efficient. This section briefly describes how 1985 data for the Fatality Database were obtained.

2.1 Design of Project

The Fatality Database consists of "case files", each representing a person fatally injured in a motor vehicle accident. Two sources of information provide data for most case files: (1) reports of investigations by coroners and medical examiners, along with supporting documentation; and (2) reports prepared by police officers who investigated fatal motor vehicle accidents, including electronic data based on those reports. Linkage of these and other sources of data is not always straightforward. For example, definitions of "motor vehicle fatality" and "reportable accident" can produce less than complete overlap of police and coroner cases within a province. Moreover, definitions of "fatal motor vehicle accident" used by transportation agencies also vary among provinces. In order to standardize our collection of data and to include as complete a set of cases as possible in the Fatality Database, we have broadly defined a motor vehicle fatality as follows: any person dying within 12 months as a result of an accident involving a motor vehicle.

Our definition of "motor vehicle fatality" is more inclusive than those used by provincial transportation agencies. For example, a motor vehicle accident officially defined as a fatal accident by transportation agencies depends on where the accident occurred and the time elapsed between the occurrence of the accident and the death of an involved person. Typical illustrations of motor vehicle fatalities excluded by transportation agencies are deaths from farm-tractor or

snowmobile accidents on private property and cases in which victims live longer than three to six months after a traffic crash on a public roadway. Our rationale for a broader definition that includes cases in these latter categories is twofold: (1) "impaired driving" as a problem behaviour extends beyond the public highways, as recognized in the recent revision of the Criminal Code of Canada; and (2) deaths due to impaired driving can be accurately counted only if virtually all victims of motor vehicle accidents are identified -- even if they live up to a year after the accident itself.

Motor vehicle fatalities not reported by provincial transportation agencies can be identified in files classified by "type of death" by coroners and medical examiners in all provinces included in the Fatality Database except Prince Edward Island. Thus, the numbers of case files in our database will be somewhat larger than those reported by provincial transport agencies, again with the exception of Prince Edward Island. At the same time, we should note here that our definition of "motor vehicle fatality" is <u>less</u> inclusive than criteria employed by coroners and medical examiners to classify "sudden or unexpected deaths". For example, we have encountered cases in which persons dying more than 10 years after involvement in a motor vehicle accident were considered traffic fatalities -- these persons had died as a result of medical conditions attributable to crash involvement several to many years before. Some coroner cases involve heart attacks that occur while persons operate motor vehicles. These fatalities are certainly related to motor vehicles (perhaps stresses associated with driving can precipitate heart attacks!); however, we have traditionally restricted the Fatality Database to cases involving deaths resulting <u>from</u> motor vehicle accidents. Similarly, persons committing suicide in ways involving motor vehicles are also excluded. Thus, the Fatality Database will include fewer case files than those categorized by coroners and medical examiners as involving motor vehicles.

Our general approach to generating case files is similar for each of the Provinces included in the Fatality Database. There are four steps in the process:

- o identification of persons fatally injured in motor vehicle accidents;
- o linkage of sources of information on the victims and the motor vehicle accidents in which they were involved;
- o data capture; and
- o data processing.

Given characteristics and indexing of coroner/medical examiner files and police-reported accident data, the only means of linking these data sources is victim name. As in the past, we initiated development of case files by processing police reports and police-reported data from provincial transportation agencies, thus ensuring capture of data on virtually all reported "traffic fatalities". Additional case files were then developed in the field during visits to provincial offices of coroners and medical examiners.

2.2 Conduct of Project

The general procedure for data capture was as follows. Victim names and data for some variables were obtained from police-reported information. These data were recorded directly on specially prepared coding sheets. To complete capture of data for these cases, project staff accessed victim files maintained by coroners and medical examiners. At provincial offices, staff members obtained toxicologic and other data, as well as complete data on other motor vehicle fatalities not identified through provincial transportation agencies.

This project differed from previous years' work in that we used, where possible, another (previously untapped) source of information: electronic data on fatal motor vehicle accidents, provided by provincial transportation agencies. Our aims in soliciting information in this form were (1) to increase efficiency in identifying persons fatally injured in motor vehicle accidents as reported by provincial transportation agencies; (2) to obtain certain data in electronic form, thus obviating redundant coding and computerization; and, most importantly,

(3) to facilitate linkage between case files in the Fatality Database and existing files in provincial and other databases (especially, TRAID). Because we made use of electronic data, either instead of or in addition to hard-copy accident reports, our procedures for data capture differed among provinces more so than in the past.

The general procedure for data capture was as follows. Victim names and data for some variables were obtained from police-reported information. These data were recorded directly on specifically prepared coding sheets. To complete capture of data for these cases, project staff accessed victim files maintained by coroners and medical examiners. At provincial offices, staff members obtained toxicologic and other data, as well as complete data on other motor vehicle fatalities not identified through provincial transportation agencies. Table 2-1 summarizes how 1985 data were obtained and processed for each of the eight provinces. Appendix K specifies data included in 1985 case files.

2.3 A Description of 1985 Case Files

Table 2-2 compares numbers of traffic fatalities reported by provincial transportation agencies with numbers of motor vehicle fatalities included in the Fatality Database. As noted above, for all provinces except Prince Edward Island, the number of case files in the database is somewhat higher than that officially reported by transportation agencies. In Prince Edward Island, however, only persons identified by the Highway Safety Division of the Department of Highways could be included. Thus, as in previous years, the number of case files for Prince Edward Island corresponds to the number of traffic fatalities reported by the Department of Highways.

Table 2-3 presents data on the distribution of fatalities according to "type of victim" (driver, passenger, pedestrian). Consistent with past years' data, over 50% of fatalities were drivers (or operators) of motor vehicles. In 1985, about 82% of fatalities were occupants of motor vehicles; 16% of motor vehicle fatalities were pedestrians. A larger number of 1985 fatalities were coded as "other/unknown" (54 of 3119

TABLE 2-1

SUMMARY OF PROVINCIAL DATA CAPTURE

Province	Method
British Columbia	o All data were coded from copies of reports and records prepared by police and coroners. o Coded data keypunched (commercial firm) and processed.
Alberta	o Data coded from files of chief medical examiner and then keypunched (commercial firm). o Supplementary data from police reports entered directly into case files.
Saskatchewan	o Data coded from coroners' files and then keypunched (commercial firm). o Other information obtained electronically from magnetic tape containing police-reported data on fatal motor vehicle accidents. o Data sets merged electronically.
Manitoba	o Information other than toxicologic data obtained electronically from magnetic tape containing police-reported data on fatal motor vehicle accidents. o Based on information sheets provided by medical examiner, toxicologic data entered directly into case files.

TABLE 2-1 (Continued)

Ontario	o Information other than toxicologic data obtained electronically from magnetic tape containing police-reported data on fatal motor vehicle accidents. o Toxicologic data coded from files of the Office of the Chief Coroner for Ontario, Toronto, and keypunched (commercial firm). o Data sets merged electronically.
New Brunswick	o Information from coroners' files coded, then keypunched (commercial firm). o Other data obtained electronically from magnetic tape; identification of victims and verification of descriptive information done with copies of hard-copy accident reports. o Data sets merged electronically.
Prince Edward Island	o Information on fatal motor vehicle accidents and traffic fatalities coded from hard-copy reports and records, then keypunched (commercial firm).
Nova Scotia	o Information from medical examiner files coded, then keypunched (commercial firm). o Other data obtained electronically from magnetic tape. o Data sets merged electronically.

TABLE 2-2

NUMBERS OF FATALITIES REPORTED BY PROVINCIAL TRANSPORTATION AGENCIES AND INCLUDED IN THE FATALITY DATABASE

PROVINCE		YEAR					
		1980	1981	1982	1983	1984	1985
British Columbia	Province	811	859	601	607	525	483
	Fatality Database	810	859	625	607	539	502
Alberta	Province	647	700	502	428	470	533
	Fatality Database	691	731	545	447	497	554
Saskatchewan	Province	265	262	240	235	221	214
	Fatality Database	290	277	252	251	241	243
Manitoba	Province	175	198	151	133	127	133
	Fatality Database	189	214	167	146	149	141
Ontario	Province	1508	1445	1138	1204	1132	1191
	Fatality Database	1644	1567	1292	1335	1301	1316
New Brunswick	Province	214	188	204	122	162	142
	Fatality Database	238	198	218	132	175	152
Nova Scotia	Province	-	-	-	-	-	155
	Fatality Database	-	-	-	-	-	174
P.E.I.	Province	35	21	16	31	31	37
	Fatality Database	35	21	16	31	31	37

Traffic Injury Research Foundation of Canada, 1986.

TABLE 2-3

DISTRIBUTION OF FATALITIES BY TYPE OF VICTIM

		DRIVER(%)	PASSENGER(%)	PEDESTRIAN(%)	OTHER/ UNKNOWN(%)	TOTAL(%)
British Columbia	-	267 (53.2)	153 (30.5)	77 (15.3)	5 (1.0)	502 (100)
Alberta	-	324 (58.5)	154 (27.8)	53 (9.6)	23 (4.2)	554 (100)
Saskatchewan	-	126 (51.9)	64 (26.3)	41 (16.9)	12 (4.9)	243 (100)
Manitoba	-	70 (49.6)	39 (27.7)	29 (20.6)	3 (2.1)	141 (100)
Ontario	-	705 (53.6)	377 (28.6)	227 (17.2)	7 (0.5)	1316 (100)
New Brunswick	-	83 (54.6)	37 (24.3)	31 (20.4)	1 (0.7)	152 (100)
Prince Edward Island	-	15 (40.5)	7 (18.9)	15 (40.5)	0 (0)	37 (100)
Nova Scotia	-	98 (56.3)	45 (25.9)	28 (16.1)	3 (1.7)	174 (100)
Total	-	1688 (54.1)	876 (28.1)	501 (16.1)	54 (1.7)	3119 (100)

Traffic Injury Research Foundation of Canada, 1986.

cases, 1.7%), compared to 1984 case files (15 of 2879 cases, 0.5%). In addition to multiple-fatality accidents for which police were unable to identify the driver, other reasons explain the higher percentage of "other/unknown" cases. For example, during this project, codes for type of victim were derived from information in standardized formats used in police reports. The aim of this method was to ensure unambiguous linkage of database case files with victim files in other databases containing police-reported accident data. But, as a result, persons fatally injured in motor vehicle accidents as "hangers-on" were coded as "other" not as passengers. Moreover, reliance on police-reported data for the variable type of victim led to a greater number of missing values, primarily for late deaths and nonreportable fatal motor vehicle accidents identified in coroner and medical examiner files. If possible, we will follow up these latter cases during the capture of data for calendar year 1986. The number of case files with "other/unknown" values for type of victim will probably decrease to about 25, less than one percent of all cases, which is consistent with previous years' data.

Finally, the reader should note that various proportions of fatalities in Table 2-3 may differ slightly from official provincial statistics. This is primarily due to differences in definitions. For example, most provinces separate bicyclists and motorcycle drivers and passengers from "driver" and "passenger" totals. To arrive at a similar distribution using the Fatality Database, the variable containing information about the type of vehicle occupied (or ridden) by the victim must also be used.

The inclusion of objective data on alcohol use by persons fatally injured in motor vehicle accidents represents a key feature of the Fatality Database. Table 2-4 presents information on rates of alcohol testing during 1985. The number and percentage of fatalities tested for alcohol are given for each group of fatalities (driver, passenger, and pedestrian) for each province. For example, in British Columbia, 229 (85.8%) of all driver fatalities were tested for alcohol.

TABLE 2-4

ALCOHOL TESTS BY TYPE OF VICTIM: 1985

PROVINCE		DRIVER	PASSENGER	PEDESTRIAN	TOTAL
British Columbia	N	229	99	55	383
	%	85.8	64.7	71.4	77.1
Alberta	N	265	85	36	386
	%	81.8	55.2	67.9	72.7
Saskatchewan	N	105	37	27	169
	%	83.3	57.8	65.9	73.2
Manitoba	N	57	15	17	89
	%	81.4	38.5	58.6	64.5
Ontario	N	573	87	137	797
	%	81.3	23.1	60.4	60.9
New Brunswick	N	56	16	15	87
	%	67.5	43.2	48.4	57.6
Prince Edward Island	N	14	6	11	31
	%	93.3	85.7	73.3	83.8
Nova Scotia	N	64	19	14	97
	%	65.3	42.2	50.0	56.7
TOTAL	N	1363	364	312	2039
	%	80.7	41.6	62.3	66.5

Traffic Injury Research Foundation of Canada, 1986.

As indicated by Table 2-4, 80.7% of all driver fatalities in the seven provinces were tested for alcohol during 1985. The alcohol-test rate for driver fatalities ranged from 65% in Nova Scotia to 93% in Prince Edward Island. In general, passengers fatally injured in motor vehicle accidents are tested less often. British Columbia, Alberta, Saskatchewan, and Prince Edward Island had relatively high rates of alcohol testing for passengers. Tests for alcohol use among pedestrian fatalities were reported for about 62% of the 1985 cases; rates of testing ranged from 48% in New Brunswick to 73% in Prince Edward Island.

3.0 AN OVERVIEW OF FINDINGS

This section presents selected findings based on data from the entire set of case files compiled for calendar year 1985 (aggregate statistics for the eight provinces combined). As mentioned above, 1985 is the first year for which data from Nova Scotia were included in the Fatality Database. Although aggregate statistics with and without data from Nova Scotia differ only slightly, we have also included aggregate statistics for the seven provinces for which we have compiled data since 1974. The seven-province data offer indications of trends, and although inclusion of Nova Scotia makes only small differences, differences in certain statistics from year to year are also small. Thus, in presenting selected findings below, we discuss eight-province aggregate statistics when referring only to calendar year 1985 (Appendix J) and seven-province aggregate statistics when comparing data for 1985 with previous years (Appendix A). Similar data for each province are contained in Appendices B through I.

Table A-1 shows the distribution of fatalities by type of victim from 1979 through 1985. Over this seven-year period, the total number of motor vehicle fatalities dropped by 25% -- from 3935 in 1979 to 2945 in 1985. The number of fatalities included in the database increased slightly from 1984 (16 additional case files). For all practical purposes, the number of motor vehicle fatalities in the seven provinces has not changed since 1983. Although the total number of motor vehicle fatalities has decreased greatly since 1979, the percentages of drivers, passengers, and pedestrians have not changed substantially. In 1985, 54% of fatalities were drivers; 28% were passengers; and 16% were pedestrians (see Table J-1).

Table J-2 presents data on alcohol use among driver fatalities grouped by type of vehicle operated. Drivers of four categories of vehicles are included: automobile; truck or van; tractor-trailer; and motorcycle. For 1985, the total number of driver fatalities in each of the four groups is given along with the number and percentage of those tested for alcohol. In 1985, the rate of alcohol testing ranged from 75% for drivers of tractor-trailers to 84% for operators of motorcycles.

Two columns in Table J-2 summarize qualitative results of alcohol tests. The number of cases in which any amount of alcohol was detected is given under the heading "number had been drinking"; the percentage of cases with positive results is found in parentheses below that number. Similarly, the number and percentage of cases in which values of blood alcohol concentration exceeded the legal limit of 80 mg% are given under the heading "number >80 mg%". The remaining five columns show the number of driver fatalities in five blood alcohol concentration (BAC) categories: 0; 1-49; 50-80, 81-150, and greater than 150 mg%.

As might be expected, drivers of automobiles form the largest group of operator fatalities. Of those tested in 1985, about 50% had been drinking prior to crash involvement and about 42% had illegal BACs. About 64% (239/376) of drinking-driver fatalities in this group had BACs greater than 150 mg%.

Operators of trucks or vans and motorcycles were the next two largest groups of driver fatalities. For both groups, the percentage of those who had been drinking and those who had illegal BACs exceeded comparable figures for automobile drivers.

The smallest group of driver fatalities in Table J-2 includes operators of tractor-trailers. Compared to the three other groups, the percentage of these operators who had been drinking is lowest. Over 80% of this group of driver fatalities had a BAC of zero.

Table A-2 compares similar data based on seven-province statistics for 1985 with those for 1984. Most notable in this table are decreased percentages of drinking-driver fatalities in each group. Substantial reductions in driver fatalities with illegal BACs occurred among drivers of trucks or vans and motorcycles. For example, in 1984, over 50% of truck/van and motorcycle drivers had illegal BACs at the time of crash involvement. In 1985, these percentages dropped to 43.5% and 41.7%, respectively.

Similar in format to Tables J-2 and A-2, Table J-3 compares driver fatalities grouped according to age, gender, and collision type (single-vehicle accident [SVA] or multiple-vehicle [MVA]).

With respect to age in 1985, the youngest and oldest groups of driver fatalities (under 16 and over 55 years of age) are least likely to have been drinking and to have illegal BACs. From 16 through 25 years of age, the older the group of driver fatalities, the higher the percentage of drinking-driver fatalities. The highest percentage of driver fatalities with illegal BACs, however, is found in the 26-35 year-old group. These percentages decline gradually through the next two ten-year age groups.

In 1985, 82% of driver fatalities were male; 90% of drinking-driver fatalities were male; and 91% of drivers with illegal BACs were male. The majority (71%) of women who died as drivers had a BAC of zero.

Compared to drivers dying in multiple-vehicle accidents, drivers dying in single-vehicle accidents were more likely to have been drinking (69% versus 37%) and to have illegal BACs (58% versus 27%). These statistics reflect the facts (1) that not all drivers responsible for the occurrence of fatal motor vehicle accidents die or are tested for BAC; and (2) that the group of drivers dying in multiple-vehicle accidents includes a higher percentage of drivers not responsible for the crash in which they died. Past research has shown that responsibility for crash involvement is strongly related to alcohol use and BAC.

Table A-4 presents data on alcohol use in a subset of driver fatalities from 1973 through 1985. This group of driver fatalities includes operators of automobiles aged 16 years or older who died within six hours of crash involvement. Table A-4 shows the number of such driver fatalities occurring during each year in the seven provinces combined; the number tested for BAC; and the number and percentage of drivers who had been drinking (any positive BAC) and who had illegal BACs (over 80 mg%).

The number of driver fatalities in this group decreased to 695 in 1984 from 1213 in 1974, then increased to 745 in 1985. Large decreases in numbers of driver fatalities occurred from 1975 to 1976 and from 1981 to 1982. The decrease from 1983 to 1984 was 115, third largest in the series. The rate of testing for alcohol has ranged from 81% in 1980 to 90.6% in 1985.

From 1973 through 1982, the number -- but not the percentage -- of drinking-driver fatalities also decreased. Similarly, the number (not the percentage) of driver fatalities with illegal BACs decreased. In 1983, 1984, and again in 1985, slightly lower percentages of drinking-driver fatalities were found. Because the percentage of such fatalities is one indicator of the magnitude of impaired-driving problems, this finding may represent a positive trend downwards in the magnitude of the alcohol-(fatal)crash problem in Canada.

APPENDIX A

AGGREGATE STATISTICS

(Seven Provinces)

TABLE A-1

PERSONS FATALLY INJURED IN MOTOR VEHICLE ACCIDENTS BY VICTIM TYPE AND YEAR OF DEATH (SEVEN PROVINCES)

YEAR		PERSONS FATALLY INJURED AS: DRIVER	PASSENGER	PEDESTRIAN	UNKNOWN	TOTAL
1979	N	2047	1110	672	106	3935
	(%)	(52.0)	(28.2)	(17.1)	(2.7)	
1980	N	2009	1161	672	55	3897
	(%)	(51.6)	(29.8)	(17.2)	(1.4)	
1981	N	2040	1133	668	27	3868
	(%)	(52.7)	(29.3)	(17.3)	(0.7)	
1982	N	1725	857	507	15	3104
	(%)	(55.6)	(27.6)	(16.3)	(0.5)	
1983	N	1686	766	481	20	2953
	(%)	(57.1)	(25.9)	(16.3)	(0.7)	
1984	N	1645	770	499	15	2929
	(%)	(56.2)	(26.3)	(17.0)	(0.5)	
1985	N	1590	831	473	51	2945
	(%)	(54.0)	(28.2)	(16.1)	(1.7)	

Traffic Injury Research Foundation of Canada, 1986.

TABLE A-2

DISTRIBUTION OF BLOOD ALCOHOL CONCENTRATION AMONG FATALLY INJURED DRIVERS* ACCORDING TO VEHICLE TYPE, BY YEAR OF DEATH (SEVEN PROVINCES)

YEAR	VEHICLE TYPE	TOTAL NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED (% TOTAL)	NUMBER HAD BEEN DRINKING (% TESTED)	NUMBER >80mg% (% TESTED)	NUMBER OF DRIVERS BY BLOOD ALCOHOL CONCENTRATION (% OF NUMBER TESTED) ZERO	1 - 49	50 - 80	81 - 150	>150
1984										
1983 936	AUTO	846	678 (80.1) 746	359 (52.9)	289 (42.6) 333	319 (47.1)	44 (6.5)	26 (3.8)	75 (11.1)	214 (31.6)
305	TRUCK-VAN	335	268 (80.0) 249	156 (58.2)	137 (51.1) 150	112 (41.8)	14 (5.2)	5 (1.9)	34 (12.7)	103 (38.4)
45	TRACTOR-TRAILER	38	27 (71.1) 34	7 (25.9)	6 (22.2) 5	20 (74.1)	0 (0.0)	1 (3.7)	3 (11.1)	3 (11.1)
220	MOTORCYCLE	217	188 (86.6) 176	122 (64.9)	96 (51.1) 91	66 (35.1)	12 (6.4)	14 (7.4)	48 (25.5)	48 (25.5)
1985										
1986 907	AUTO	851	711 (83.5) 791	354 (49.9)	294 (41.4) 312	357 (50.2)	40 (5.6)	20 (2.8)	69 (9.7)	225 (31.6)
290	TRUCK-VAN	309	262 (84.8) 257	140 (53.4)	114 (43.5) 137	122 (46.6)	13 (5.0)	13 (5.0)	25 (9.5)	89 (34.0)
36	TRACTOR-TRAILER	39	29 (74.4) 28	5 (17.2)	4 (13.8) 7	24 (82.8)	1 (3.4)	0 (0.0)	0 (0.0)	4 (13.8)
205	MOTORCYCLE	192	163 (84.9) 178	101 (62.0)	68 (41.7) 87	62 (38.0)	20 (12.3)	13 (8.0)	29 (17.8)	39 (23.9)

* 16 years of age and over.

Traffic Injury Research Foundation of Canada, 1986.

1983

* pen marks are for 1986.

TABLE A-3

DISTRIBUTION OF BAC AMONG FATALLY INJURED DRIVERS (ALL VEHICLES EXCEPT BICYCLES, SNOWMOBILES, AND FARM TRACTORS) ACCORDING TO AGE, SEX, AND TYPE OF COLLISION, BY YEAR OF DEATH (SEVEN PROVINCES)

YEAR	CATEGORY	TOTAL NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED (% TOTAL)	NUMBER HAD BEEN DRINKING (% TESTED)	NUMBER >80mg% (% TESTED)	NUMBER OF DRIVERS BY BLOOD ALCOHOL CONCENTRATION (% OF NUMBER TESTED) ZERO	1 - 49	50 - 80	81 - 150	>150
1985	<16	62	29 (46.8)	2 (6.9)	0 (0.0)	27 (93.1)	0 (0.0)	2 (6.9)	0 (0.0)	0 (0.0)
	16 - 17	73	60 (82.2)	25 (41.7)	17 (28.3)	35 (58.3)	4 (6.7)	4 (6.7)	7 (11.7)	10 (16.7)
	18 - 19	132	116 (87.9)	65 (56.0)	51 (44.0)	51 (44.0)	9 (7.8)	5 (4.3)	19 (16.4)	32 (27.6)
	20 - 25	408	354 (87.8)	224 (63.3)	169 (47.7)	130 (36.7)	32 (9.0)	23 (6.5)	48 (13.6)	121 (34.2)
	26 - 35	329	281 (85.4)	165 (58.7)	142 (50.5)	116 (41.3)	14 (5.0)	9 (3.2)	39 (13.9)	103 (36.7)
	36 - 45	207	172 (83.1)	85 (49.4)	73 (42.4)	87 (50.6)	10 (5.8)	2 (1.2)	8 (4.7)	65 (37.8)
	46 - 55	106	95 (89.6)	29 (30.5)	25 (26.3)	66 (69.5)	2 (2.1)	2 (2.1)	2 (2.1)	23 (24.2)
	>55	265	184 (69.4)	54 (29.3)	40 (21.7)	130 (70.7)	10 (5.4)	4 (2.2)	8 (4.3)	32 (17.4)
	MALE	1300	1060 (81.5)	584 (55.1)	467 (44.1)	476 (44.9)	72 (6.8)	45 (4.2)	113 (10.7)	354 (33.4)
	FEMALE	282	231 (81.9)	65 (28.1)	50 (21.6)	166 (71.9)	9 (3.9)	6 (2.6)	18 (7.8)	32 (13.9)
	SVA	638	550 (86.2)	373 (67.8)	316 (57.4)	177 (32.2)	32 (5.8)	25 (4.5)	70 (12.7)	246 (44.7)
	MVA	937	739 (78.9)	274 (37.1)	200 (27.1)	465 (62.9)	48 (6.5)	26 (3.5)	61 (8.3)	139 (18.8)
	UNKNOWN	7	2 (28.6)	2 (100)	1 (50.0)	0 (0.0)	1 (50.0)	0 (0.0)	0 (0.0)	1 (50.0)

TABLE A-4

DISTRIBUTION OF BAC AMONG FATALLY INJURED AUTOMOBILE DRIVERS
16 YEARS OF AGE AND OLDER DYING WITHIN 6 HOURS OF CRASH
(SEVEN PROVINCES)

YEAR	NUMBER OF DRIVERS	NUMBER TESTED (% TESTED)	NUMBER AND PERCENT OF TESTED DRIVERS HAD BEEN DRINKING	ABOVE LEGAL LIMIT
1973	1175	1033 (87.9)	614 (59.4)	517 (50.0)
1974	1213	1060 (87.4)	625 (59.0)	504 (47.5)
1975	1207	1082 (89.6)	642 (59.3)	508 (47.0)
1976	950	806 (84.8)	486 (60.3)	387 (48.0)
1977	881	737 (83.7)	423 (57.4)	348 (47.2)
1978	868	750 (86.4)	430 (57.3)	357 (47.6)
1979	918	774 (84.3)	443 (57.2)	370 (47.8)
1980	893	726 (81.3)	435 (59.9)	358 (49.3)
1981	968	835 (86.3)	500 (59.9)	423 (50.7)
1982	809	681 (84.2)	385 (56.5)	321 (47.1)
1983	810	725 (89.5)	390 (53.8)	323 (44.6)
1984	695	620 (89.2)	333 (53.7)	267 (43.1)
1985	745	675 (90.6)	338 (50.1)	280 (41.5)

Traffic Injury Research Foundation of Canada, 1986.

APPENDIX B

BRITISH COLUMBIA

TABLE B-1

PERSONS FATALLY INJURED IN MOTOR VEHICLE ACCIDENTS BY VICTIM TYPE AND YEAR OF DEATH (BRITISH COLUMBIA)

		PERSONS FATALLY INJURED AS:				
YEAR		DRIVER	PASSENGER	PEDESTRIAN	UNKNOWN	TOTAL
1979	N	424	213	141	19	797
	(%)	(53.2)	(26.7)	(17.7)	(2.4)	(100)
1980	N	430	248	123	9	810
	(%)	(53.1)	(30.6)	(15.2)	(1.1)	(100)
1981	N	450	274	135	0	859
	(%)	(52.4)	(31.9)	(15.7)	(0.0)	(100)
1982	N	360	167	94	4	625
	(%)	(57.6)	(26.7)	(15.0)	(0.6)	(100)
1983	N	344	178	82	3	607
	(%)	(56.7)	(29.3)	(13.5)	(0.5)	(100)
1984	N	293	145	97	4	539
	(%)	(54.4)	(26.9)	(18.0)	(0.7)	(100)
1985	N	267	153	77	5	502
	(%)	(53.2)	(30.5)	(15.3)	(1.0)	(100)

Traffic Injury Research Foundation of Canada, 1986.

TABLE B-2

DISTRIBUTION OF BLOOD ALCOHOL CONCENTRATION AMONG FATALLY INJURED DRIVERS*
ACCORDING TO VEHICLE TYPE, BY YEAR OF DEATH
(BRITISH COLUMBIA)

YEAR	VEHICLE TYPE	TOTAL NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED (% TOTAL)	NUMBER HAD BEEN DRINKING (% TESTED)	NUMBER >80mg% (% TESTED)	NUMBER OF DRIVERS BY BLOOD ALCOHOL CONCENTRATION (% OF NUMBER TESTED) ZERO	1 - 49	50 - 80	81 - 150	>150
1984										
	AUTO	154	123 (79.9)	72 (58.5)	59 (48.0)	51 (41.5)	9 (7.3)	4 (3.3)	20 (16.3)	39 (31.7)
	TRUCK-VAN	66	47 (71.2)	30 (63.8)	28 (59.6)	17 (36.2)	0 (0.0)	2 (4.3)	7 (14.9)	21 (44.7)
	TRACTOR-TRAILER	10	4 (40.0)	0 (0.0)	0 (0.0)	4 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	MOTORCYCLE	40	34 (85.0)	23 (67.6)	20 (58.8)	11 (32.4)	1 (2.9)	2 (5.9)	10 (29.4)	10 (29.4)
1985										
	AUTO	135	117 (86.7)	56 (47.9)	49 (41.9)	61 (52.1)	6 (5.1)	1 (0.9)	12 (10.3)	37 (31.6)
	TRUCK-VAN	49	46 (93.9)	27 (58.7)	21 (45.7)	19 (41.3)	1 (2.2)	5 (10.9)	2 (4.3)	19 (41.3)
	TRACTOR-TRAILER	9	6 (66.7)	2 (33.3)	1 (16.7)	4 (66.7)	1 (16.7)	0 (0.0)	0 (0.0)	1 (16.7)
	MOTORCYCLE	35	30 (85.7)	19 (63.3)	12 (40.0)	11 (36.7)	3 (10.0)	4 (13.3)	6 (20.0)	6 (20.0)

* 16 years of age and over.

Traffic Injury Research Foundation of Canada, 1986.

TABLE B-3

DISTRIBUTION OF BAC AMONG FATALLY INJURED DRIVERS (ALL VEHICLES EXCEPT BICYCLES, SNOWMOBILES, AND FARM TRACTORS) ACCORDING TO AGE, SEX, AND TYPE OF COLLISION, BY YEAR OF DEATH (BRITISH COLUMBIA).

YEAR	CATEGORY	TOTAL NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED (% TOTAL)	NUMBER HAD BEEN DRINKING (% TESTED)	NUMBER >80mg% (% TESTED)	NUMBER OF DRIVERS BY BLOOD ALCOHOL CONCENTRATION (% OF NUMBER TESTED)				
						ZERO	1 - 49	50 - 80	81 - 150	>150
1985	< 16	10	5 (50.0)	1 (20.0)	0 (0.0)	4 (80.0)	0 (0.0)	1 (20.0)	0 (0.0)	0 (0.0)
	16 - 17	10	9 (90.0)	6 (66.7)	5 (55.6)	3 (33.3)	0 (0.0)	1 (11.1)	2 (22.2)	3 (33.3)
	18 - 19	20	20 (100)	8 (40.0)	5 (25.0)	12 (60.0)	1 (5.0)	2 (10.0)	4 (20.0)	1 (5.0)
	20 - 25	59	56 (94.9)	36 (64.3)	29 (51.8)	20 (35.7)	3 (5.4)	4 (7.1)	6 (10.7)	23 (41.1)
	26 - 35	68	58 (85.3)	33 (56.9)	27 (46.6)	25 (43.1)	4 (6.9)	2 (3.4)	9 (15.5)	18 (31.0)
	36 - 45	38	31 (81.6)	16 (51.6)	12 (38.7)	15 (48.4)	4 (12.9)	0 (0.0)	1 (3.2)	11 (35.5)
	46 - 55	21	18 (85.7)	6 (33.3)	6 (33.3)	12 (66.7)	0 (0.0)	0 (0.0)	0 (0.0)	6 (33.3)
	> 55	40	31 (77.5)	7 (22.6)	6 (19.4)	24 (77.4)	0 (0.0)	1 (3.2)	0 (0.0)	6 (19.4)
	MALE	228	198 (86.8)	105 (53.0)	83 (41.9)	93 (47.0)	11 (5.6)	11 (5.6)	20 (10.1)	63 (31.8)
	FEMALE	38	30 (78.9)	8 (26.7)	7 (23.3)	22 (73.3)	1 (3.3)	0 (0.0)	2 (6.7)	5 (16.7)
	SVA	131	117 (89.3)	76 (65.0)	64 (54.7)	41 (35.0)	7 (6.0)	5 (4.3)	10 (8.5)	54 (46.2)
	MVA	134	110 (82.1)	36 (32.7)	26 (23.6)	74 (67.3)	4 (3.6)	6 (5.5)	12 (10.9)	14 (12.7)
	UNKNOWN	1	1 (100)	1 (100)	0 (0.0)	0 (0.0)	1 (100)	0 (0.0)	0 (0.0)	0 (0.0)

TABLE B-4

DISTRIBUTION OF BAC AMONG FATALLY INJURED AUTOMOBILE DRIVERS
16 YEARS OF AGE AND OLDER DYING WITHIN 6 HOURS OF CRASH
(BRITISH COLUMBIA)

YEAR	NUMBER OF DRIVERS	NUMBER TESTED (% TESTED)	NUMBER AND PERCENT OF TESTED DRIVERS HAD BEEN DRINKING	NUMBER AND PERCENT OF TESTED DRIVERS ABOVE LEGAL LIMIT
1973	194	172 (88.7)	99 (57.6)	81 (47.1)
1974	252	207 (82.1)	121 (58.5)	104 (50.2)
1975	207	172 (83.1)	115 (66.9)	102 (59.3)
1976	174	145 (83.3)	90 (62.1)	79 (54.5)
1977	149	113 (75.8)	68 (60.2)	62 (54.9)
1978	113	89 (78.8)	65 (73.0)	55 (61.8)
1979	136	101 (74.3)	59 (58.4)	54 (53.5)
1980	148	90 (60.8)	57 (63.3)	46 (51.1)
1981	193	152 (78.8)	104 (68.4)	93 (61.2)
1982	164	135 (82.3)	83 (61.5)	73 (54.1)
1983	136	113 (83.1)	80 (70.8)	73 (64.6)
1984	117	108 (92.3)	66 (61.1)	53 (49.1)
1985	115	108 (93.9)	52 (48.1)	45 (41.7)

Traffic Injury Research Foundation of Canada, 1986.

APPENDIX C

ALBERTA

TABLE C-1

PERSONS FATALLY INJURED IN MOTOR VEHICLE ACCIDENTS BY VICTIM TYPE AND YEAR OF DEATH (ALBERTA)

YEAR		PERSONS FATALLY INJURED AS: DRIVER	PASSENGER	PEDESTRIAN	UNKNOWN	TOTAL
1979	N	383	222	76	63	744
	(%)	(51.5)	(29.8)	(10.2)	(8.5)	(100)
1980	N	365	215	84	27	691
	(%)	(52.8)	(31.1)	(12.2)	(3.9)	(100)
1981	N	370	244	106	11	731
	(%)	(50.6)	(33.4)	(14.5)	(1.5)	(100)
1982	N	315	152	75	3	545
	(%)	(57.8)	(27.9)	(13.8)	(0.6)	(100)
1983	N	262	123	60	2	447
	(%)	(58.6)	(27.5)	(13.4)	(0.4)	(100)
1984	N	294	143	56	4	497
	(%)	(59.2)	(28.8)	(11.3)	(0.8)	(100)
1985	N	324	154	53	23	554
	(%)	(58.5)	(27.8)	(9.6)	(4.2)	(100)

Traffic Injury Research Foundation of Canada, 1986.

TABLE C-2

DISTRIBUTION OF BLOOD ALCOHOL CONCENTRATION AMONG FATALLY INJURED DRIVERS*
ACCORDING TO VEHICLE TYPE, BY YEAR OF DEATH
(ALBERTA)

YEAR	VEHICLE TYPE	TOTAL NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED (% TOTAL)	NUMBER HAD BEEN DRINKING (% TESTED)	NUMBER >80mg% (% TESTED)	NUMBER OF DRIVERS BY BLOOD ALCOHOL CONCENTRATION (% OF NUMBER TESTED) ZERO	1 - 49	50 - 80	81 - 150	>150
1984										
	AUTO	152	115 (75.7)	65 (56.5)	49 (42.6)	50 (43.5)	9 (7.8)	7 (6.1)	9 (7.8)	40 (34.8)
	TRUCK-VAN	94	72 (76.6)	37 (51.4)	29 (40.3)	35 (48.6)	7 (9.7)	1 (1.4)	6 (8.3)	23 (31.9)
	TRACTOR-TRAILER	9	8 (88.9)	4 (50.0)	3 (37.5)	4 (50.0)	0 (0.0)	1 (12.5)	0 (0.0)	3 (37.5)
	MOTORCYCLE	20	17 (85.0)	12 (70.6)	9 (52.9)	5 (29.4)	2 (11.8)	1 (5.9)	2 (11.8)	7 (41.2)
1985										
	AUTO	162	133 (82.1)	59 (44.4)	54 (40.6)	74 (55.6)	4 (3.0)	1 (0.8)	10 (7.5)	44 (33.1)
	TRUCK-VAN	110	90 (81.8)	48 (53.3)	41 (45.6)	42 (46.7)	6 (6.7)	1 (1.1)	9 (10.0)	32 (35.6)
	TRACTOR-TRAILER	6	4 (66.7)	0 (0.0)	0 (0.0)	4 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	MOTORCYCLE	26	21 (80.8)	16 (76.2)	10 (47.6)	5 (23.8)	2 (9.5)	4 (19.0)	5 (23.8)	5 (23.8)

* 16 years of age and over.

Traffic Injury Research Foundation of Canada, 1986.

TABLE C-3

DISTRIBUTION OF BAC AMONG FATALLY INJURED DRIVERS (ALL VEHICLES EXCEPT BICYCLES, SNOWMOBILES, AND FARM TRACTORS) ACCORDING TO AGE, SEX, AND TYPE OF COLLISION, BY YEAR OF DEATH (ALBERTA)

YEAR	CATEGORY	TOTAL NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED (% TOTAL)	NUMBER HAD BEEN DRINKING (% TESTED)	NUMBER > 80mg% (% TESTED)	NUMBER OF DRIVERS BY BLOOD ALCOHOL CONCENTRATION (% OF NUMBER TESTED) ZERO	1 - 49	50 - 80	81 - 150	> 150
1985	< 16	8	7 (87.5)	1 (14.3)	0 (0.0)	6 (85.7)	0 (0.0)	1 (14.3)	0 (0.0)	0 (0.0)
	16 - 17	17	12 (70.6)	5 (41.7)	5 (41.7)	7 (58.3)	0 (0.0)	0 (0.0)	3 (25.0)	2 (16.7)
	18 - 19	33	30 (90.9)	20 (66.7)	15 (50.0)	10 (33.3)	2 (6.7)	3 (10.0)	4 (13.3)	11 (36.7)
	20 - 25	77	62 (80.5)	41 (66.1)	34 (54.8)	21 (33.9)	5 (8.1)	2 (3.2)	7 (11.3)	27 (43.5)
	26 - 35	78	62 (79.5)	31 (50.0)	31 (50.0)	31 (50.0)	0 (0.0)	0 (0.0)	8 (12.9)	23 (37.1)
	36 - 45	36	31 (86.1)	17 (54.8)	14 (45.2)	14 (45.2)	2 (6.5)	1 (3.2)	0 (0.0)	14 (45.2)
	46 - 55	16	15 (93.8)	1 (6.7)	1 (6.7)	14 (93.3)	0 (0.0)	0 (0.0)	0 (0.0)	1 (6.7)
	> 55	58	45 (77.6)	12 (26.7)	9 (20.0)	33 (73.3)	3 (6.7)	0 (0.0)	2 (4.4)	7 (15.6)
	MALE	248	203 (81.9)	114 (56.2)	96 (47.3)	89 (43.8)	11 (5.4)	7 (3.4)	19 (9.4)	77 (37.9)
	FEMALE	75	61 (81.3)	14 (23.0)	13 (21.3)	47 (77.0)	1 (1.6)	0 (0.0)	5 (8.2)	8 (13.1)
	SVA	109	97 (89.0)	71 (73.2)	63 (64.9)	26 (26.8)	4 (4.1)	4 (4.1)	15 (15.5)	48 (49.5)
	MVA	213	167 (78.4)	57 (34.1)	46 (27.5)	110 (65.9)	8 (4.8)	3 (1.8)	9 (5.4)	37 (22.2)
	UNKNOWN	1	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

TABLE C-4

DISTRIBUTION OF BAC AMONG FATALLY INJURED AUTOMOBILE DRIVERS
16 YEARS OF AGE AND OLDER DYING WITHIN 6 HOURS OF CRASH
(ALBERTA)

YEAR	NUMBER OF DRIVERS	NUMBER TESTED (% TESTED)	NUMBER AND PERCENT OF TESTED DRIVERS HAD BEEN DRINKING	ABOVE LEGAL LIMIT
1973	155	129 (83.2)	87 (67.4)	75 (58.1)
1974	155	142 (91.6)	84 (59.2)	67 (47.2)
1975	153	147 (96.1)	91 (61.9)	70 (47.6)
1976	125	118 (94.4)	60 (50.9)	44 (37.3)
1977	124	111 (89.5)	61 (55.0)	47 (42.3)
1978	147	129 (87.8)	70 (54.3)	51 (39.5)
1979	172	145 (84.3)	59 (40.7)	52 (35.9)
1980	140	90 (64.3)	58 (64.4)	49 (54.4)
1981	159	125 (78.6)	70 (56.0)	58 (46.4)
1982	116	79 (68.1)	50 (63.3)	34 (43.0)
1983	114	102 (89.5)	53 (52.0)	43 (42.2)
1984	115	97 (84.3)	57 (58.8)	43 (44.3)
1985	147	126 (85.7)	58 (46.0)	53 (42.1)

Traffic Injury Research Foundation of Canada, 1986.

APPENDIX D

SASKATCHEWAN

TABLE D-1

PERSONS FATALLY INJURED IN MOTOR VEHICLE ACCIDENTS BY VICTIM TYPE AND YEAR OF DEATH (SASKATCHEWAN)

PERSONS FATALLY INJURED AS:

YEAR		DRIVER	PASSENGER	PEDESTRIAN	UNKNOWN	TOTAL
1979	N	157	95	40	5	297
	(%)	(52.9)	(32.0)	(13.5)	(1.7)	(100)
1980	N	137	111	40	2	290
	(%)	(47.2)	(38.3)	(13.8)	(0.7)	(100)
1981	N	153	78	39	7	277
	(%)	(55.2)	(28.2)	(14.1)	(2.5)	(100)
1982	N	139	83	28	2	252
	(%)	(55.2)	(32.9)	(11.1)	(0.8)	(100)
1983	N	140	65	33	13	251
	(%)	(55.8)	(25.9)	(13.1)	(5.2)	(100)
1984	N	126	66	44	5	241
	(%)	(52.3)	(27.4)	(18.3)	(2.1)	(100)
1985	N	126	64	41	12	243
	(%)	(51.9)	(26.3)	(16.9)	(4.9)	(100)

Traffic Injury Research Foundation of Canada, 1986.

TABLE D-2

DISTRIBUTION OF BLOOD ALCOHOL CONCENTRATION AMONG FATALLY INJURED DRIVERS*
ACCORDING TO VEHICLE TYPE, BY YEAR OF DEATH
(SASKATCHEWAN)

YEAR	VEHICLE TYPE	TOTAL NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED (% TOTAL)	NUMBER HAD BEEN DRINKING (% TESTED)	NUMBER >80mg% (% TESTED)	NUMBER OF DRIVERS BY BLOOD ALCOHOL CONCENTRATION (% OF NUMBER TESTED) ZERO	1 - 49	50 - 80	81 - 150	>150
1984										
	AUTO	45	38 (84.4)	23 (60.5)	18 (47.4)	15 (39.5)	4 (10.5)	1 (2.6)	4 (10.5)	14 (36.8)
	TRUCK-VAN	49	40 (81.6)	24 (60.0)	19 (47.5)	16 (40.0)	4 (10.0)	1 (2.5)	6 (15.0)	13 (32.5)
	TRACTOR-TRAILER	4	3 (75.0)	0 (0.0)	0 (0.0)	3 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	MOTORCYCLE	12	10 (83.3)	5 (50.0)	4 (40.0)	5 (50.0)	0 (0.0)	1 (10.0)	3 (30.0)	1 (10.0)
1985										
	AUTO	51	41 (80.4)	24 (58.5)	18 (43.9)	17 (41.5)	3 (7.3)	3 (7.3)	3 (7.3)	15 (36.6)
	TRUCK-VAN	33	30 (90.9)	15 (50.0)	12 (40.0)	15 (50.0)	2 (6.7)	1 (3.3)	4 (13.3)	8 (26.7)
	TRACTOR-TRAILER	3	1 (33.3)	0 (0.0)	0 (0.0)	1 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	MOTORCYCLE	7	6 (85.7)	3 (50.0)	3 (50.0)	3 (50.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (50.0)

* 16 years of age and over.

Traffic Injury Research Foundation of Canada, 1986.

TABLE D-3

DISTRIBUTION OF BAC AMONG FATALLY INJURED DRIVERS (ALL VEHICLES EXCEPT BICYCLES, SNOWMOBILES, AND FARM TRACTORS) ACCORDING TO AGE, SEX, AND TYPE OF COLLISION, BY YEAR OF DEATH (SASKATCHEWAN)

YEAR	CATEGORY	TOTAL NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED (% TOTAL)	NUMBER HAD BEEN DRINKING (% TESTED)	NUMBER >80mg% (% TESTED)	NUMBER OF DRIVERS BY BLOOD ALCOHOL CONCENTRATION (% OF NUMBER TESTED) ZERO	1 - 49	50 - 80	81 - 150	>150
1985	< 16	7	4 (57.1)	0 (0.0)	0 (0.0)	4 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	16 - 17	6	4 (66.7)	2 (50.0)	0 (0.0)	2 (50.0)	1 (25.0)	1 (25.0)	0 (0.0)	0 (0.0)
	18 - 19	10	9 (90.0)	7 (77.8)	6 (66.7)	2 (22.2)	1 (11.1)	0 (0.0)	2 (22.2)	4 (44.4)
	20 - 25	27	25 (92.6)	16 (64.0)	11 (44.0)	9 (36.0)	2 (8.0)	3 (12.0)	1 (4.0)	10 (40.0)
	26 - 35	30	28 (93.3)	19 (67.9)	15 (53.6)	9 (32.1)	3 (10.7)	1 (3.6)	4 (14.3)	11 (39.3)
	36 - 45	10	9 (90.0)	5 (55.6)	5 (55.6)	4 (44.4)	0 (0.0)	0 (0.0)	0 (0.0)	5 (55.6)
	46 - 55	10	9 (90.0)	4 (44.4)	4 (44.4)	5 (55.6)	0 (0.0)	0 (0.0)	1 (11.1)	3 (33.3)
	> 55	26	17 (65.4)	3 (17.6)	2 (11.8)	14 (82.4)	1 (5.9)	0 (0.0)	0 (0.0)	2 (11.8)
	MALE	101	82 (81.2)	49 (59.8)	39 (47.6)	33 (40.2)	7 (8.5)	3 (3.7)	6 (7.3)	33 (40.2)
	FEMALE	25	23 (92.0)	7 (30.4)	4 (17.4)	16 (69.6)	1 (4.3)	2 (8.7)	2 (8.7)	2 (8.7)
	SVA	69	61 (88.4)	41 (67.2)	35 (57.4)	20 (32.8)	4 (6.6)	2 (3.3)	6 (9.8)	29 (47.5)
	MVA	57	44 (77.2)	15 (34.1)	8 (18.2)	29 (65.9)	4 (9.1)	3 (6.8)	2 (4.5)	6 (13.6)

TABLE D-4

DISTRIBUTION OF BAC AMONG FATALLY INJURED AUTOMOBILE DRIVERS
16 YEARS OF AGE AND OLDER DYING WITHIN 6 HOURS OF CRASH
(SASKATCHEWAN)

YEAR	NUMBER OF DRIVERS	NUMBER TESTED (% TESTED)	NUMBER AND PERCENT OF TESTED DRIVERS HAD BEEN DRINKING	ABOVE LEGAL LIMIT
1973	71	49 (69.0)	36 (73.5)	31 (63.3)
1974	81	65 (80.3)	44 (67.7)	37 (56.9)
1975	100	82 (82.0)	35 (42.7)	26 (31.7)
1976	53	33 (62.3)	23 (69.7)	20 (60.6)
1977	56	42 (75.0)	25 (59.5)	21 (50.0)
1978	62	38 (61.3)	19 (50.0)	16 (42.1)
1979	67	50 (74.6)	28 (56.0)	18 (36.0)
1980	51	47 (92.2)	28 (59.6)	22 (46.8)
1981	62	50 (80.6)	25 (50.0)	23 (46.0)
1982	64	56 (87.5)	25 (44.6)	22 (39.3)
1983	66	58 (87.9)	24 (41.4)	17 (29.3)
1984	42	37 (88.1)	22 (59.5)	18 (48.6)
1985	42	40 (95.2)	24 (60.0)	18 (45.0)

Traffic Injury Research Foundation of Canada, 1986.

APPENDIX E

MANITOBA

TABLE E-1

PERSONS FATALLY INJURED IN MOTOR VEHICLE ACCIDENTS BY VICTIM TYPE AND YEAR OF DEATH (MANITOBA)

YEAR		PERSONS FATALLY INJURED AS: DRIVER	PASSENGER	PEDESTRIAN	UNKNOWN	TOTAL
1979	N	100	53	39	1	193
	(%)	(51.8)	(27.5)	(20.2)	(0.5)	(100)
1980	N	91	57	39	2	189
	(%)	(48.1)	(30.2)	(20.6)	(1.1)	(100)
1981	N	107	58	49	0	214
	(%)	(50.0)	(27.1)	(22.9)	(0.0)	(100)
1982	N	80	55	32	0	167
	(%)	(47.9)	(32.9)	(19.2)	(0.0)	(100)
1983	N	77	27	42	0	146
	(%)	(52.7)	(18.5)	(28.8)	(0.0)	(100)
1984	N	79	45	24	1	149
	(%)	(53.0)	(30.2)	(16.1)	(0.7)	(100)
1985	N	70	39	29	3	141
	(%)	(49.6)	(27.7)	(20.6)	(2.1)	(100)

Traffic Injury Research Foundation of Canada, 1986.

TABLE E-2

DISTRIBUTION OF BLOOD ALCOHOL CONCENTRATION AMONG FATALLY INJURED DRIVERS*
ACCORDING TO VEHICLE TYPE, BY YEAR OF DEATH
(MANITOBA)

YEAR	VEHICLE TYPE	TOTAL NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED (% TOTAL)	NUMBER HAD BEEN DRINKING (% TESTED)	NUMBER >80mg% (% TESTED)	NUMBER OF DRIVERS BY BLOOD ALCOHOL CONCENTRATION (% OF NUMBER TESTED) ZERO	1 - 49	50 - 80	81 - 150	>150
1984										
	AUTO	27	24 (88.9)	10 (41.7)	7 (29.2)	14 (58.3)	2 (8.3)	1 (4.2)	1 (4.2)	6 (25.0)
	TRUCK-VAN	24	22 (91.7)	13 (59.1)	12 (54.5)	9 (40.9)	1 (4.5)	0 (0.0)	2 (9.1)	10 (45.5)
	TRACTOR-TRAILER	4	2 (50.0)	2 (100)	2 (100)	0 (0.0)	0 (0.0)	0 (0.0)	2 (100)	0 (0.0)
	MOTORCYCLE	8	8 (100)	4 (50.0)	2 (25.0)	4 (50.0)	1 (12.5)	1 (12.5)	2 (25.0)	0 (0.0)
1985										
	AUTO	33	25 (75.8)	12 (48.0)	11 (44.0)	13 (52.0)	1 (4.0)	0 (0.0)	1 (4.0)	10 (40.0)
	TRUCK-VAN	19	17 (89.5)	10 (58.8)	7 (41.2)	7 (41.2)	2 (11.8)	1 (5.9)	3 (17.6)	4 (23.5)
	TRACTOR-TRAILER	5	3 (60.0)	1 (33.3)	1 (33.3)	2 (66.7)	0 (0.0)	0 (0.0)	0 (0.0)	1 (33.3)
	MOTORCYCLE	10	9 (90.0)	5 (55.6)	2 (22.2)	4 (44.4)	2 (22.2)	1 (11.1)	0 (0.0)	2 (22.2)

* 16 years of age and over.

Traffic Injury Research Foundation of Canada, 1986.

TABLE 8-.

DISTRIBUTION OF BAC AMONG FATALLY INJURED DRIVERS (ALL VEHICLES EXCEPT BICYCLES, SNOWMOBILES, AND FARM TRACTORS) ACCORDING TO AGE, SEX, AND TYPE OF COLLISION, BY YEAR OF DEATH (MANITOBA)

YEAR	CATEGORY	TOTAL NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED (% TOTAL)	NUMBER HAD BEEN DRINKING (% TESTED)	NUMBER > 80mg% (% TESTED)	NUMBER OF DRIVERS BY BLOOD ALCOHOL CONCENTRATION (% OF NUMBER TESTED) ZERO	1 - 49	50 - 80	81 - 150	>150
1985	< 16	1	1 (100)	0 (0.0)	0 (0.0)	1 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	16 - 17	7	6 (85.7)	4 (66.7)	4 (66.7)	2 (33.3)	0 (0.0)	0 (0.0)	1 (16.7)	3 (50.0)
	18 - 19	8	8 (100)	5 (62.5)	5 (62.5)	3 (37.5)	0 (0.0)	0 (0.0)	1 (12.5)	4 (50.0)
	20 - 25	24	18 (75.0)	10 (55.6)	5 (27.8)	8 (44.4)	4 (22.2)	1 (5.6)	1 (5.6)	4 (22.2)
	26 - 35	7	6 (85.7)	4 (66.7)	2 (33.3)	2 (33.3)	1 (16.7)	1 (16.7)	0 (0.0)	2 (33.3)
	36 - 45	9	7 (77.8)	3 (42.9)	3 (42.9)	4 (57.1)	0 (0.0)	0 (0.0)	0 (0.0)	3 (42.9)
	46 - 55	3	3 (100)	1 (33.3)	1 (33.3)	2 (66.7)	0 (0.0)	0 (0.0)	0 (0.0)	1 (33.3)
	> 55	11	8 (72.7)	2 (25.0)	2 (25.0)	6 (75.0)	0 (0.0)	0 (0.0)	1 (12.5)	1 (12.5)
	MALE	62	49 (79.0)	28 (57.1)	21 (42.9)	21 (42.9)	5 (10.2)	2 (4.1)	3 (6.1)	18 (36.7)
	FEMALE	8	8 (100)	1 (12.5)	1 (12.5)	7 (87.5)	0 (0.0)	0 (0.0)	1 (12.5)	0 (0.0)
	SVA	31	27 (87.1)	19 (70.4)	15 (55.6)	8 (29.6)	2 (7.4)	2 (7.4)	3 (11.1)	12 (44.4)
	HVA	38	29 (76.3)	9 (31.0)	6 (20.7)	20 (69.0)	3 (10.3)	0 (0.0)	1 (3.4)	5 (17.2)
	UNKNOWN	1	1 (100)	1 (100)	1 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (100)

TABLE E-4

DISTRIBUTION OF BAC AMONG FATALLY INJURED AUTOMOBILE DRIVERS
16 YEARS OF AGE AND OLDER DYING WITHIN 6 HOURS OF CRASH
(MANITOBA)

YEAR	NUMBER OF DRIVERS	NUMBER TESTED (% TESTED)	NUMBER AND PERCENT OF TESTED DRIVERS HAD BEEN DRINKING	NUMBER AND PERCENT OF TESTED DRIVERS ABOVE LEGAL LIMIT
1973	69	51 (73.9)	39 (76.5)	34 (66.7)
1974	67	59 (88.1)	34 (57.6)	26 (44.1)
1975	50	46 (92.0)	31 (67.4)	25 (54.4)
1976	69	64 (92.8)	46 (71.9)	35 (54.7)
1977	41	29 (70.7)	21 (72.4)	14 (48.3)
1978	51	39 (76.5)	21 (53.9)	20 (51.3)
1979	55	48 (87.3)	26 (54.2)	19 (39.6)
1980	35	32 (91.4)	20 (62.5)	16 (50.0)
1981	46	42 (91.3)	19 (45.2)	15 (35.7)
1982	26	24 (92.3)	16 (66.7)	15 (62.5)
1983	36	35 (97.2)	21 (60.0)	13 (37.1)
1984	23	23 (100)	10 (43.5)	7 (30.4)
1985	27	22 (81.5)	10 (45.5)	9 (40.9)

Traffic Injury Research Foundation of Canada, 1986.

APPENDIX F

ONTARIO

TABLE F-1

PERSONS FATALLY INJURED IN MOTOR VEHICLE ACCIDENTS BY VICTIM TYPE AND YEAR OF DEATH (ONTARIO)

YEAR		PERSONS FATALLY INJURED AS: DRIVER	PASSENGER	PEDESTRIAN	UNKNOWN	TOTAL
1979	N	821	441	323	13	1598
	(%)	(51.4)	(27.6)	(20.2)	(0.8)	(100)
1980	N	852	444	333	15	1644
	(%)	(51.8)	(27.0)	(20.3)	(0.9)	(100)
1981	N	851	419	291	7	1568
	(%)	(54.3)	(26.7)	(18.6)	(0.4)	(100)
1982	N	714	334	229	4	1281
	(%)	(55.7)	(26.1)	(17.9)	(0.3)	(100)
1983	N	759	337	240	2	1338
	(%)	(56.7)	(25.2)	(17.9)	(0.1)	(100)
1984	N	730	322	246	0	1298
	(%)	(56.2)	(24.8)	(19.0)	(0.0)	(100)
1985	N	705	377	227	7	1316
	(%)	(53.6)	(28.6)	(17.2)	(0.5)	(100)

Traffic Injury Research Foundation of Canada, 1986.

TABLE F-2

DISTRIBUTION OF BLOOD ALCOHOL CONCENTRATION AMONG FATALLY INJURED DRIVERS*
ACCORDING TO VEHICLE TYPE, BY YEAR OF DEATH
(ONTARIO)

YEAR	VEHICLE TYPE	TOTAL NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED (% TOTAL)	NUMBER HAD BEEN DRINKING (% TESTED)	NUMBER >80mg% (% TESTED)	NUMBER OF DRIVERS BY BLOOD ALCOHOL CONCENTRATION (% OF NUMBER TESTED) ZERO	1 - 49	50 - 80	81 - 150	>150
1984										
	AUTO	402	329 (81.8)	160 (48.6)	131 (39.8)	169 (51.4)	18 (5.5)	11 (3.3)	35 (10.6)	96 (29.2)
	TRUCK-VAN	82	72 (87.8)	45 (62.5)	42 (58.3)	27 (37.5)	2 (2.8)	1 (1.4)	12 (16.7)	30 (41.7)
	TRACTOR-TRAILER	9	8 (88.9)	1 (12.5)	1 (12.5)	7 (87.5)	0 (0.0)	0 (0.0)	1 (12.5)	0 (0.0)
	MOTORCYCLE	121	108 (89.3)	74 (68.5)	58 (53.7)	34 (31.5)	7 (6.5)	9 (8.3)	29 (26.9)	29 (26.9)
1985										
	AUTO	416	353 (84.9)	182 (51.6)	143 (40.5)	171 (48.4)	26 (7.4)	13 (3.7)	39 (11.0)	104 (29.5)
	TRUCK-VAN	90	75 (83.3)	38 (50.7)	31 (41.3)	37 (49.3)	2 (2.7)	5 (6.7)	6 (8.0)	25 (33.3)
	TRACTOR-TRAILER	12	11 (91.7)	1 (9.1)	1 (9.1)	10 (90.9)	0 (0.0)	0 (0.0)	0 (0.0)	1 (9.1)
	MOTORCYCLE	102	87 (85.3)	51 (58.6)	35 (40.2)	36 (41.4)	12 (13.8)	4 (4.6)	15 (17.2)	20 (23.0)

* 16 years of age and over.

Traffic Injury Research Foundation of Canada, 1986.

TABLE F-3

DISTRIBUTION OF BAC AMONG FATALLY INJURED DRIVERS (ALL VEHICLES EXCEPT BICYCLES, SNOWMOBILES, AND FARM TRACTORS) ACCORDING TO AGE, SEX, AND TYPE OF COLLISION, BY YEAR OF DEATH (ONTARIO)

YEAR	CATEGORY	TOTAL NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED (% TOTAL)	NUMBER HAD BEEN DRINKING (% TESTED)	NUMBER >80mg% (% TESTED)	NUMBER OF DRIVERS BY BLOOD ALCOHOL CONCENTRATION (% OF NUMBER TESTED) ZERO	1 - 49	50 - 80	81 - 150	>150
1985	< 16	29	7 (24.1)	0 (0.0)	0 (0.0)	7 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	16 - 17	29	28 (96.6)	7 (25.0)	2 (7.1)	21 (75.0)	3 (10.7)	2 (7.1)	1 (3.6)	1 (3.6)
	18 - 19	54	45 (83.3)	25 (55.6)	20 (44.4)	20 (44.4)	5 (11.1)	0 (0.0)	8 (17.8)	12 (26.7)
	20 - 25	193	168 (87.0)	105 (62.5)	77 (45.8)	63 (37.5)	17 (10.1)	11 (6.5)	29 (17.3)	48 (28.6)
	26 - 35	124	111 (89.5)	67 (60.4)	56 (50.5)	44 (39.6)	6 (5.4)	5 (4.5)	14 (12.6)	42 (37.8)
	36 - 45	105	89 (84.8)	42 (47.2)	37 (41.6)	47 (52.8)	4 (4.5)	1 (1.1)	7 (7.9)	30 (33.7)
	46 - 55	52	48 (92.3)	17 (35.4)	13 (27.1)	31 (64.6)	2 (4.2)	2 (4.2)	1 (2.1)	12 (25.0)
	> 55	115	73 (63.5)	28 (38.4)	19 (26.0)	45 (61.6)	6 (8.2)	3 (4.1)	5 (6.8)	14 (19.2)
	MALE	582	474 (81.4)	259 (54.6)	202 (42.6)	215 (45.4)	37 (7.8)	20 (4.2)	57 (12.0)	145 (30.6)
	FEMALE	119	95 (79.8)	32 (33.7)	22 (23.2)	63 (66.3)	6 (6.3)	4 (4.2)	8 (8.4)	14 (14.7)
	SVA	251	213 (84.9)	143 (67.1)	118 (55.4)	70 (32.9)	15 (7.0)	10 (4.7)	30 (14.1)	88 (41.3)
	MVA	449	356 (79.3)	148 (41.6)	106 (29.8)	208 (58.4)	28 (7.9)	14 (3.9)	35 (9.8)	71 (19.9)
	UNKNOWN	1	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

TABLE F-4

DISTRIBUTION OF BAC AMONG FATALLY INJURED AUTOMOBILE DRIVERS
16 YEARS OF AGE AND OLDER DYING WITHIN 6 HOURS OF CRASH
(ONTARIO)

YEAR	NUMBER OF DRIVERS	NUMBER TESTED (% TESTED)	NUMBER AND PERCENT OF TESTED DRIVERS HAD BEEN DRINKING	ABOVE LEGAL LIMIT
1973	604	568 (94.0)	310 (54.6)	257 (45.3)
1974	577	525 (91.0)	302 (57.5)	236 (45.0)
1975	620	574 (92.6)	334 (58.2)	256 (44.6)
1976	457	401 (87.8)	239 (59.6)	186 (46.4)
1977	444	395 (89.0)	214 (54.2)	172 (43.5)
1978	424	403 (95.1)	222 (55.1)	187 (46.4)
1979	426	384 (90.1)	237 (61.7)	198 (51.6)
1980	453	419 (92.5)	244 (58.2)	206 (49.2)
1981	460	432 (93.9)	252 (58.3)	208 (48.1)
1982	384	357 (93.0)	189 (52.9)	159 (44.5)
1983	398	370 (93.0)	183 (49.5)	152 (41.1)
1984	337	309 (91.7)	150 (48.5)	122 (39.5)
1985	363	338 (93.1)	174 (51.5)	137 (40.5)

Traffic Injury Research Foundation of Canada, 1986.

APPENDIX G

NEW BRUNSWICK

TABLE G-1

PERSONS FATALLY INJURED IN MOTOR VEHICLE ACCIDENTS BY VICTIM TYPE AND YEAR OF DEATH
(NEW BRUNSWICK)

YEAR		PERSONS FATALLY INJURED AS: DRIVER	PASSENGER	PEDESTRIAN	UNKNOWN	TOTAL
1979	N	145	79	44	5	273
	(%)	(53.1)	(28.9)	(16.1)	(1.8)	(100)
1980	N	120	74	44	0	238
	(%)	(50.4)	(31.1)	(18.5)	(0.0)	(100)
1981	N	103	51	42	2	198
	(%)	(52.0)	(25.8)	(21.2)	(1.0)	(100)
1982	N	112	63	41	2	218
	(%)	(51.4)	(28.9)	(18.8)	(0.9)	(100)
1983	N	81	32	20	0	133
	(%)	(60.9)	(24.1)	(15.0)	(0.0)	(100)
1984	N	102	45	27	0	174
	(%)	(58.6)	(25.9)	(15.5)	(0.0)	(100)
1985	N	83	37	31	1	152
	(%)	(54.6)	(24.3)	(20.4)	(0.7)	(100)

Traffic Injury Research Foundation of Canada, 1986.

TABLE G-2

DISTRIBUTION OF BLOOD ALCOHOL CONCENTRATION AMONG FATALLY INJURED DRIVERS*
ACCORDING TO VEHICLE TYPE, BY YEAR OF DEATH
(NEW BRUNSWICK)

YEAR	VEHICLE TYPE	TOTAL NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED (% TOTAL)	NUMBER HAD BEEN DRINKING (% TESTED)	NUMBER >80mg% (% TESTED)	NUMBER OF DRIVERS BY BLOOD ALCOHOL CONCENTRATION (% OF NUMBER TESTED)				
						ZERO	1 - 49	50 - 80	81 - 150	>150
1984										
	AUTO	54	39 (72.2)	22 (56.4)	19 (48.7)	17 (43.6)	1 (2.6)	2 (5.1)	6 (15.4)	13 (33.3)
	TRUCK-VAN	14	9 (64.3)	4 (44.4)	4 (44.4)	5 (55.6)	0 (0.0)	0 (0.0)	1 (11.1)	3 (33.3)
	TRACTOR-TRAILER	2	2 (100)	0 (0.0)	0 (0.0)	2 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	MOTORCYCLE	15	10 (66.7)	3 (30.0)	2 (20.0)	7 (70.0)	1 (10.0)	0 (0.0)	2 (20.0)	0 (0.0)
1985										
	AUTO	46	35 (76.1)	18 (51.4)	16 (45.7)	17 (48.6)	0 (0.0)	2 (5.7)	4 (11.4)	12 (34.3)
	TRUCK-VAN	8	4 (50.0)	2 (50.0)	2 (50.0)	2 (50.0)	0 (0.0)	0 (0.0)	1 (25.0)	1 (25.0)
	TRACTOR-TRAILER	3	3 (100)	0 (0.0)	0 (0.0)	3 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	MOTORCYCLE	8	6 (75.0)	4 (66.7)	4 (66.7)	2 (33.3)	0 (0.0)	0 (0.0)	3 (50.0)	1 (16.7)

* 16 years of age and over.

Traffic Injury Research Foundation of Canada, 1986.

TABLE C-3

DISTRIBUTION OF BAC AMONG FATALLY INJURED DRIVERS (ALL VEHICLES EXCEPT BICYCLES, SNOWMOBILES, AND FARM TRACTORS) ACCORDING TO AGE, SEX, AND TYPE OF COLLISION, BY YEAR OF DEATH (NEW BRUNSWICK)

YEAR	CATEGORY	TOTAL NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED (% TOTAL)	NUMBER HAD BEEN DRINKING (% TESTED)	NUMBER >80mg% (% TESTED)	NUMBER OF DRIVERS BY BLOOD ALCOHOL CONCENTRATION (% OF NUMBER TESTED) ZERO	1 - 49	50 - 80	81 - 150	>150
1985	<16	6	4 (66.7)	0 (0.0)	0 (0.0)	4 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	16 - 17	3	1 (33.3)	1 (100)	1 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (100)
	18 - 19	7	4 (57.1)	0 (0.0)	0 (0.0)	4 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	20 - 25	21	18 (85.7)	11 (61.1)	9 (50.0)	7 (38.9)	0 (0.0)	2 (11.1)	4 (22.2)	5 (27.8)
	26 - 35	20	14 (70.0)	10 (71.4)	10 (71.4)	4 (28.6)	0 (0.0)	0 (0.0)	4 (28.6)	6 (42.9)
	36 - 45	8	4 (50.0)	2 (50.0)	2 (50.0)	2 (50.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (50.0)
	46 - 55	3	1 (33.3)	0 (0.0)	0 (0.0)	1 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	>55	13	8 (61.5)	1 (12.5)	1 (12.5)	7 (87.5)	0 (0.0)	0 (0.0)	0 (0.0)	1 (12.5)
	MALE	67	43 (64.2)	22 (51.2)	20 (46.5)	21 (48.8)	0 (0.0)	2 (4.7)	8 (18.6)	12 (27.9)
	FEMALE	14	11 (78.6)	3 (27.3)	3 (27.3)	8 (72.7)	0 (0.0)	0 (0.0)	0 (0.0)	3 (27.3)
	SVA	41	29 (70.7)	18 (62.1)	16 (55.2)	11 (37.9)	0 (0.0)	2 (6.9)	6 (20.7)	10 (34.5)
	MVA	37	25 (67.6)	7 (28.0)	7 (28.0)	18 (72.0)	0 (0.0)	0 (0.0)	2 (8.0)	5 (20.0)
	UNKNOWN	3	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

TABLE C-4

DISTRIBUTION OF BAC AMONG FATALLY INJURED AUTOMOBILE DRIVERS
16 YEARS OF AGE AND OLDER DYING WITHIN 6 HOURS OF CRASH
(NEW BRUNSWICK)

YEAR	NUMBER OF DRIVERS	NUMBER TESTED (% TESTED)	NUMBER AND PERCENT OF TESTED DRIVERS HAD BEEN DRINKING	NUMBER AND PERCENT OF TESTED DRIVERS ABOVE LEGAL LIMIT
1973	75	57 (76.0)	39 (68.4)	35 (61.4)
1974	72	53 (73.6)	35 (66.0)	29 (54.7)
1975	65	49 (75.4)	31 (63.3)	24 (49.0)
1976	67	40 (59.7)	23 (57.5)	18 (45.0)
1977	60	40 (66.7)	28 (70.0)	26 (65.0)
1978	65	48 (73.9)	29 (60.4)	25 (52.1)
1979	56	41 (73.2)	32 (78.0)	27 (65.9)
1980	60	43 (71.7)	28 (65.1)	19 (44.2)
1981	46	32 (69.6)	28 (87.5)	24 (75.0)
1982	53	29 (54.7)	21 (72.4)	17 (58.6)
1983	46	36 (78.3)	23 (63.9)	19 (52.8)
1984	51	38 (74.5)	22 (57.9)	19 (50.0)
1985	43	34 (79.1)	17 (50.0)	15 (44.1)

Traffic Injury Research Foundation of Canada, 1986.

APPENDIX H

PRINCE EDWARD ISLAND

TABLE H-1

PERSONS FATALLY INJURED IN MOTOR VEHICLE ACCIDENTS BY VICTIM TYPE AND YEAR OF DEATH
(PRINCE EDWARD ISLAND)

YEAR		PERSONS FATALLY INJURED AS: DRIVER	PASSENGER	PEDESTRIAN	UNKNOWN	TOTAL
1979	N	17	7	9	0	33
	(%)	(51.5)	(21.2)	(27.3)	(0.0)	(100)
1980	N	14	12	9	0	35
	(%)	(40.0)	(34.3)	(25.7)	(0.0)	(100)
1981	N	6	9	6	0	21
	(%)	(28.6)	(42.9)	(28.6)	(0.0)	(100)
1982	N	5	3	8	0	16
	(%)	(31.3)	(18.8)	(50.0)	(0.0)	(100)
1983	N	23	4	4	0	31
	(%)	(74.2)	(12.9)	(12.9)	(0.0)	(100)
1984	N	21	4	5	1	31
	(%)	(67.7)	(12.9)	(16.1)	(3.2)	(100)
1985	N	15	7	15	0	37
	(%)	(40.5)	(18.9)	(40.5)	(0.0)	(100)

Traffic Injury Research Foundation of Canada, 1986.

TABLE H-2

DISTRIBUTION OF BLOOD ALCOHOL CONCENTRATION AMONG FATALLY INJURED DRIVERS*
ACCORDING TO VEHICLE TYPE, BY YEAR OF DEATH
(PRINCE EDWARD ISLAND)

YEAR	VEHICLE TYPE	TOTAL NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED (% TOTAL)	NUMBER HAD BEEN DRINKING (% TESTED)	NUMBER >80mg% (% TESTED)	NUMBER OF DRIVERS BY BLOOD ALCOHOL CONCENTRATION (% OF NUMBER TESTED)				
						ZERO	1 - 49	50 - 80	81 - 150	>150
1984										
	AUTO	12	10 (83.3)	7 (70.0)	6 (60.0)	3 (30.0)	1 (10.0)	0 (0.0)	0 (0.0)	6 (60.0)
	TRUCK-VAN	6	6 (100)	3 (50.0)	3 (50.0)	3 (50.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (50.0)
	TRACTOR-TRAILER	0	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	MOTORCYCLE	1	1 (100)	1 (100)	1 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (100)
1985										
	AUTO	8	7 (87.5)	3 (42.9)	3 (42.9)	4 (57.1)	0 (0.0)	0 (0.0)	0 (0.0)	3 (42.9)
	TRUCK-VAN	0	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	TRACTOR-TRAILER	1	1 (100)	1 (100)	1 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (100)
	MOTORCYCLE	4	4 (100)	3 (75.0)	2 (50.0)	1 (25.0)	1 (25.0)	0 (0.0)	0 (0.0)	2 (50.0)

* 16 years of age and over.

Traffic Inju. Research Foundation of Canada, 1986.

TABLE H-3

DISTRIBUTION OF BAC AMONG FATALLY INJURED DRIVERS (ALL VEHICLES EXCEPT BICYCLES, SNOWMOBILES, AND FARM TRACTORS) ACCORDING TO AGE, SEX, AND TYPE OF COLLISION, BY YEAR OF DEATH (PRINCE EDWARD ISLAND)

YEAR	CATEGORY	TOTAL NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED (% TOTAL)	NUMBER HAD BEEN DRINKING (% TESTED)	NUMBER >80mg% (% TESTED)	NUMBER OF DRIVERS BY BLOOD ALCOHOL CONCENTRATION (% OF NUMBER TESTED) ZERO	1 - 49	50 - 80	81 - 150	>150
1985	<16	1	1 (100)	0 (0.0)	0 (0.0)	1 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	16 - 17	1	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	18 - 19	0	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	20 - 25	7	7 (100)	5 (71.4)	4 (57.1)	2 (28.6)	1 (14.3)	0 (0.0)	0 (0.0)	4 (57.1)
	26 - 35	2	2 (100)	1 (50.0)	1 (50.0)	1 (50.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (50.0)
	36 - 45	1	1 (100)	0 (0.0)	0 (0.0)	1 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	46 - 55	1	1 (100)	0 (0.0)	0 (0.0)	1 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	> 55	2	2 (100)	1 (50.0)	1 (50.0)	1 (50.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (50.0)
	MALE	12	11 (91.7)	7 (63.6)	6 (54.5)	4 (36.4)	1 (9.1)	0 (0.0)	0 (0.0)	6 (54.5)
	FEMALE	3	3 (100)	0 (0.0)	0 (0.0)	3 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	SVA	6	6 (100)	5 (83.3)	5 (83.3)	1 (16.7)	0 (0.0)	0 (0.0)	0 (0.0)	5 (83.3)
	MVA	9	8 (88.9)	2 (25.0)	1 (12.5)	6 (75.0)	1 (12.5)	0 (0.0)	0 (0.0)	1 (12.5)

Traffic Injury Research Foundation of Canada, 1986.

TABLE H-4

DISTRIBUTION OF BAC AMONG FATALLY INJURED AUTOMOBILE DRIVERS
16 YEARS OF AGE AND OLDER DYING WITHIN 6 HOURS OF CRASH
(PRINCE EDWARD ISLAND)

YEAR	NUMBER OF DRIVERS	NUMBER TESTED (% TESTED)	NUMBER AND PERCENT OF TESTED DRIVERS HAD BEEN DRINKING	NUMBER AND PERCENT OF TESTED DRIVERS ABOVE LEGAL LIMIT
1973	7	7 (100.0)	4 (57.1)	4 (57.1)
1974	9	9 (100.0)	5 (55.6)	5 (55.6)
1975	12	12 (100.0)	5 (41.7)	5 (41.7)
1976	5	5 (100.0)	5 (100.0)	5 (100.0)
1977	7	7 (100.0)	6 (85.7)	6 (85.7)
1978	6	4 (66.7)	4 (100.0)	3 (75.0)
1979	6	5 (83.3)	2 (40.0)	2 (40.0)
1980	6	5 (83.3)	0 (0.0)	0 (0.0)
1981	2	2 (100)	2 (100.0)	2 (100.0)
1982	2	1 (50.0)	1 (100.0)	1 (100.0)
1983	14	11 (78.6)	6 (54.5)	6 (54.5)
1984	10	8 (80.0)	6 (75.0)	5 (62.5)
1985	8	7 (87.5)	3 (42.9)	3 (42.9)

Traffic Injury Research Foundation of Canada, 1986.

APPENDIX I

NOVA SCOTIA

TABLE I-1

PERSONS FATALLY INJURED IN MOTOR VEHICLE ACCIDENTS BY VICTIM TYPE AND YEAR OF DEATH (NOVA SCOTIA)

		PERSONS FATALLY INJURED AS:				
YEAR		DRIVER	PASSENGER	PEDESTRIAN	UNKNOWN	TOTAL
1985	N	98	45	28	3	174
	(%)	(56.3)	(25.9)	(16.1)	(1.7)	(100)

Traffic Injury Research Foundation of Canada, 1986.

TABLE I-2

DISTRIBUTION OF BLOOD ALCOHOL CONCENTRATION AMONG FATALLY INJURED DRIVERS* ACCORDING TO VEHICLE TYPE, BY YEAR OF DEATH (NOVA SCOTIA)

YEAR	VEHICLE TYPE	TOTAL NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED (% TOTAL)	NUMBER HAD BEEN DRINKING (% TESTED)	NUMBER >80mg% (% TESTED)	NUMBER OF DRIVERS BY BLOOD ALCOHOL CONCENTRATION (% OF NUMBER TESTED) ZERO	1 - 49	50 - 80	81 - 150	>150
1985										
	AUTO	49	36 (73.5)	22 (61.1)	17 (47.2)	14 (38.9)	4 (11.1)	1 (2.8)	3 (8.3)	14 (38.9)
	TRUCK-VAN	21	14 (66.7)	9 (64.3)	8 (57.1)	5 (35.7)	1 (7.1)	0 (0.0)	0 (0.0)	8 (57.1)
	TRACTOR-TRAILER	1	1 (100)	0 (0.0)	0 (0.0)	1 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	MOTORCYCLE	12	9 (75.0)	6 (66.7)	6 (66.7)	3 (33.3)	0 (0.0)	0 (0.0)	2 (22.2)	4 (44.4)

* 16 years of age and over.

Traffic Injury Research Foundation of Canada, 1986.

TABLE 1-3

DISTRIBUTION OF BAC AMONG FATALLY INJURED DRIVERS (ALL VEHICLES EXCEPT BICYCLES, SNOWMOBILES, AND FARM TRACTORS) ACCORDING TO AGE, SEX, AND TYPE OF COLLISION, BY YEAR OF DEATH
(NOVA SCOTIA)

YEAR	CATEGORY	TOTAL NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED (% TOTAL)	NUMBER HAD BEEN DRINKING (% TESTED)	NUMBER >80mg% (% TESTED)	NUMBER OF DRIVERS BY BLOOD ALCOHOL CONCENTRATION (% OF NUMBER TESTED) ZERO	1 - 49	50 - 80	81 - 150	>150
1985	<16	6	2 (33.3)	1 (50.0)	0 (0.0)	1 (50.0)	1 (50.0)	0 (0.0)	0 (0.0)	0 (0.0)
	16 - 17	5	3 (60.0)	1 (33.3)	1 (33.3)	2 (66.7)	0 (0.0)	0 (0.0)	1 (33.3)	0 (0.0)
	18 - 19	5	3 (60.0)	2 (66.7)	2 (66.7)	1 (33.3)	0 (0.0)	0 (0.0)	1 (33.3)	1 (33.3)
	20 - 25	25	20 (80.0)	15 (75.0)	15 (75.0)	5 (25.0)	0 (0.0)	0 (0.0)	3 (15.0)	12 (60.0)
	26 - 35	19	15 (78.9)	9 (60.0)	8 (53.3)	6 (40.0)	1 (6.7)	0 (0.0)	1 (6.7)	7 (46.7)
	36 - 45	14	8 (57.1)	6 (75.0)	4 (50.0)	2 (25.0)	1 (12.5)	1 (12.5)	0 (0.0)	4 (50.0)
	46 - 55	10	5 (50.0)	2 (40.0)	2 (40.0)	3 (60.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (40.0)
	>55	14	8 (57.1)	4 (50.0)	1 (12.5)	4 (50.0)	3 (37.5)	0 (0.0)	0 (0.0)	1 (12.5)
	MALE	76	55 (72.4)	36 (65.5)	31 (56.4)	19 (34.5)	4 (7.3)	1 (1.8)	6 (10.9)	25 (45.5)
	FEMALE	22	9 (40.9)	4 (44.4)	2 (22.2)	5 (55.6)	2 (22.2)	0 (0.0)	0 (0.0)	2 (22.2)
	SVA	55	39 (70.9)	31 (79.5)	26 (66.7)	8 (20.5)	4 (10.3)	1 (2.6)	6 (15.4)	20 (51.3)
	MVA	40	24 (60.0)	9 (37.5)	7 (29.2)	15 (62.5)	2 (8.3)	0 (0.0)	0 (0.0)	7 (29.2)
	UNKNOWN	3	1 (33.3)	0 (0.0)	0 (0.0)	1 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

TABLE I-4

DISTRIBUTION OF BAC AMONG FATALLY INJURED AUTOMOBILE DRIVERS
16 YEARS OF AGE AND OLDER DYING WITHIN 6 HOURS OF CRASH
(NOVA SCOTIA)

YEAR	NUMBER OF DRIVERS	NUMBER TESTED (% TESTED)	NUMBER AND PERCENT OF TESTED DRIVERS HAD BEEN DRINKING	NUMBER AND PERCENT OF TESTED DRIVERS ABOVE LEGAL LIMIT
1985	43	35 (81.4)	22 (62.9)	17 (48.6)

Traffic Injury Research Foundation of Canada, 1986.

APPENDIX J

AGGREGATE STATISTICS

(Eight Provinces)

TABLE J-1

PERSONS FATALLY INJURED IN MOTOR VEHICLE ACCIDENTS BY VICTIM TYPE AND YEAR OF DEATH (EIGHT PROVINCES)

YEAR		PERSONS FATALLY INJURED AS: DRIVER	PASSENGER	PEDESTRIAN	UNKNOWN	TOTAL
1985	N	1688	876	501	54	3119
	(%)	(54.1)	(28.1)	(16.1)	(1.7)	(100)

Traffic Injury Research Foundation of Canada, 1986.

TABLE J-2

DISTRIBUTION OF BLOOD ALCOHOL CONCENTRATION AMONG FATALLY INJURED DRIVERS*
ACCORDING TO VEHICLE TYPE, BY YEAR OF DEATH
(EIGHT PROVINCES)

YEAR	VEHICLE TYPE	TOTAL NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED (% TOTAL)	NUMBER HAD BEEN DRINKING (% TESTED)	NUMBER >80mg% (% TESTED)	NUMBER OF DRIVERS BY BLOOD ALCOHOL CONCENTRATION (% OF NUMBER TESTED)				
						ZERO	1 - 49	50 - 80	81 - 150	>150
1985	AUTO	900	747 (83.0)	376 (50.3)	311 (41.6)	371 (49.7)	44 (5.9)	21 (2.8)	72 (9.6)	239 (32.0)
	TRUCK-VAN	330	276 (83.6)	149 (54.0)	122 (44.2)	127 (46.0)	14 (5.1)	13 (4.7)	25 (9.1)	97 (35.1)
	TRACTOR-TRAILER	40	30 (75.0)	5 (16.7)	4 (13.3)	25 (83.3)	1 (3.3)	0 (0.0)	0 (0.0)	4 (13.3)
	MOTORCYCLE	204	172 (84.3)	107 (62.2)	74 (43.0)	65 (37.8)	20 (11.6)	13 (7.6)	31 (18.0)	43 (25.0)

* 16 years of age and over.

Traffic Injury Research Foundation of Canada, 1986.

TABLE J-3

DISTRIBUTION OF BAC AMONG FATALLY INJURED DRIVERS (ALL VEHICLES EXCEPT BICYCLES, SNOWMOBILES, AND FARM TRACTORS) ACCORDING TO AGE, SEX, AND TYPE OF COLLISION, BY YEAR OF DEATH (EIGHT PROVINCES)

YEAR	CATEGORY	TOTAL NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED (% TOTAL)	NUMBER HAD BEEN DRINKING (% TESTED)	NUMBER >80mg% (% TESTED)	NUMBER OF DRIVERS BY BLOOD ALCOHOL CONCENTRATION (% OF NUMBER TESTED) ZERO	1 - 49	50 - 80	81 - 150	>150
1985	< 16	68	31 (45.6)	3 (9.7)	0 (0.0)	28 (90.3)	1 (3.2)	2 (6.5)	0 (0.0)	0 (0.0)
	16 - 17	78	63 (80.8)	26 (41.3)	18 (28.6)	37 (58.7)	4 (6.3)	4 (6.3)	8 (12.7)	10 (15.9)
	18 - 19	137	119 (86.9)	67 (56.3)	53 (44.5)	52 (43.7)	9 (7.6)	5 (4.2)	20 (16.8)	33 (27.7)
	20 - 25	433	374 (86.4)	239 (63.9)	184 (49.2)	135 (36.1)	32 (8.6)	23 (6.1)	51 (13.6)	133 (35.6)
	26 - 35	348	296 (85.1)	174 (58.8)	150 (50.7)	122 (41.2)	15 (5.1)	9 (3.0)	40 (13.5)	110 (37.2)
	36 - 45	220	180 (81.8)	91 (50.6)	77 (42.8)	89 (49.4)	11 (6.1)	3 (1.7)	8 (4.4)	69 (38.3)
	46 - 55	116	100 (86.2)	31 (31.0)	27 (27.0)	69 (69.0)	2 (2.0)	2 (2.0)	2 (2.0)	25 (25.0)
	> 55	279	192 (68.8)	58 (30.2)	41 (21.4)	134 (69.8)	13 (6.8)	4 (2.1)	8 (4.2)	33 (17.2)
	MALE	1376	1115 (81.0)	620 (55.6)	498 (44.7)	495 (44.4)	76 (6.8)	46 (4.1)	119 (10.7)	379 (34.0)
	FEMALE	304	240 (78.9)	69 (28.7)	52 (21.7)	171 (71.2)	11 (4.6)	6 (2.5)	18 (7.5)	34 (14.2)
	SVA	693	589 (85.0)	404 (68.6)	342 (58.1)	185 (31.4)	36 (6.1)	26 (4.4)	76 (12.9)	266 (45.2)
	MVA	977	763 (78.1)	283 (37.1)	207 (27.1)	480 (62.9)	50 (6.6)	26 (3.4)	61 (8.0)	146 (19.1)
	UNKNOWN	10	3 (30.0)	2 (66.7)	1 (33.3)	1 (33.3)	1 (33.3)	0 (0.0)	0 (0.0)	1 (33.3)

TABLE J-4

DISTRIBUTION OF BAC AMONG FATALLY INJURED AUTOMOBILE DRIVERS
16 YEARS OF AGE AND OLDER DYING WITHIN 6 HOURS OF CRASH
(EIGHT PROVINCES)

YEAR	NUMBER OF DRIVERS	NUMBER TESTED (% TESTED)	NUMBER AND PERCENT OF TESTED DRIVERS HAD BEEN DRINKING	NUMBER AND PERCENT OF TESTED DRIVERS ABOVE LEGAL LIMIT
Total	788	710 (90.1)	360 (50.7)	297 (41.8)

Traffic Injury Research Foundation of Canada, 1986.

APPENDIX K

FATALITY DATABASE: DATA SPECIFICATION

ALCOHOL USE BY TRAFFIC FATALITIES: SPECIFICATION OF DATA COLLECTED

DATUM	COMMENT
Provincial Crash Number	- The provincial crash identification number. For non-highway, motor-vehicle-related accidents, this number will contain multiple "9"s.
Province	- Province in which crash occurs.
Crash Year	
Crash Month	
Crash Day of Month	
Crash Day of Week	
Crash Hour	
Collision Object(s)	- The object(s) with which the motor vehicle has collided in the accident sequence.
Victim's Vehicle Type	
Police Report Vehicle Number of Victim Vehicle	- The vehicle number assigned the vehicle by police completing the accident report form.
Type of Victim	- Driver, passenger, pedestrian, etc., reported according to the standardized format used in police reports.
Victim Age	
Victim Sex	
Elapsed Hours To Death	- The total number of elapsed hours from the crash occurrence until death.
Alcohol Test One Result	
Alcohol Test One Medium	
Specimen for Alcohol Test One	- Antemortem or postmortem specimen
Alcohol Test Two Result	
Alcohol Test Two Medium	
Specimen for Alcohol Test Two	- Antemortem or postmortem specimen

TIRF	YEAR
TRAFFIC INJURY RESEARCH FOUNDATION DATABASE	
	1985
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	FORMAT:
VARIABLE ACRONYM: CASE	
	Alpha
COMMON NAMES: Case no., Accident no., Report no., Collision no.	7 Characters

DEFINITION: The number assigned to an accident by the relevant provincial authority to serve as a unique identifier. It indicates the most up to date report of the motor vehicle accident.

VALUES

PROVINCE	RANGE
Newfoundland	0001 - 9999
P.E.I.	00001 - 99999
Nova Scotia	00001 - 99999
New Brunswick	000001 - 999999
Quebec	000001 - 999999
Ontario	85000001 - 85999999
Manitoba	000001 - 999999
Saskatchewan	000001 - 999999
Alberta	000001 - 999999
British Columbia	AA00001 - ZZ99999
Yukon	0001 - 9999
Northwest Territory	0001 - 9999

TIRF	RANGE
All:	AA000001 - ZZ999999

NOTES: British Columbia has two leading alpha's which represent police jurisdiction. Ontario has crash year as a prefix to it's case number.

TIRF		YEAR
TRAFFIC INJURY RESEARCH FOUNDATION DATABASE		
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		FORMAT:
VARIABLE ACRONYM: PROV		
		Alpha
COMMON NAMES: Province		2 Characters

DEFINITION: This TIRF specific variable represents the province in which the accident occurred.

VALUES

PROVINCE	RANGE	TIRF	RANGE
		British Columbia	1
		Alberta	2
		Saskatchewan	3
		Manitoba	4
		Ontario	5
		Quebec	6
		New Brunswick	7
		Nova Scotia	8
		P.E.I.	9
		Newfoundland	10
		Yukon	11
		Northwest Territory	12

NOTES:

TIRF		YEAR
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		FORMAT:
VARIABLE ACRONYM: CRSY		
		Numeric
COMMON NAMES: Crash year		2 Digit

DEFINITION: The last two digits of the year in which the accident occurred.

VALUES

PROVINCE	RANGE	TIRF	RANGE
All:			
(19)yy	85+	(19)yy	85+

NOTES:

TIRF		YEAR
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FIELD INFORMATION SHEET		
		FORMAT:
VARIABLE ACRONYM: CRSM		
		Numeric
COMMON NAMES: Crash month		2 Digit

DEFINITION: The month in which the accident occurred.

VALUES

PROVINCE	RANGE	TIRF	RANGE
All:			
mm	1-12	mm	1-12

NOTES:

TIRF

TRAFFIC INJURY RESEARCH FOUNDATION DATABASE

FIELD INFORMATION SHEET

YEAR

1985

VARIABLE ACRONYM: CRSD

FORMAT:

Numeric

COMMON NAMES: Crash day

2 Digit

DEFINITION: The day of the month that the accident took place.

VALUES

PROVINCE	RANGE	TIRF	RANGE
All:			
dd	1-31	dd	1-31

NOTES:

TIRF	YEAR
TRAFFIC INJURY RESEARCH FOUNDATION DATABASE	
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	FORMAT:
VARIABLE ACRONYM: CRSW	
	Alpha
COMMON NAMES: Crash weekday	1 Character

DEFINITION: The day of the week in which the accident occurred.

VALUES

PROVINCE	RANGE	TIRF	RANGE
British Columbia	missing	Monday	1
Alberta	missing	Tuesday	2
Saskatchewan	missing	Wednesday	3
Manitoba	1-7	Thursday	4
Ontario	1-7	Friday	5
New Brunswick	Mon. - Sun.	Saturday	6
Nova Scotia	Mon. - Sun.	Sunday	7
P.E.I.	1-7	Missing	-

NOTES:

TIRF		YEAR
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		FORMAT:
VARIABLE ACRONYM: CRSH		
		Numeric
COMMON NAMES: Crash hour		4 Digits

DEFINITION: The hour of the day in which the accident occurred, using the twenty-four hour clock.

VALUES

PROVINCE	RANGE	TIRF	RANGE
British Columbia	0000 - 2359	All:	0000 - 2359
Alberta	0000 - 2359		
Saskatchewan	0000 - 2359		
Manitoba	missing		
Ontario	0000 - 2359		
New Brunswick	0000 - 2359		
Nova Scotia	0000 - 2359		
P.E.I.	0000 - 2359		

NOTES:

TIRF		YEAR
	TRAFFIC INJURY RESEARCH FOUNDATION DATABASE	
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	FIELD INFORMATION SHEET	
		FORMAT:
VARIABLE ACRONYM: V1C1, V1C2, V1C3, V2C1, V2C2, V2C3		
		Alpha
COMMON NAMES: Incident collision, collision object		2 Characters

DEFINITION: The object(s) with which the vehicle collides during the accident sequence, a maximum of three per vehicle.

VALUES

PROVINCE	RANGE
British Columbia	01 - 44, 99
Alberta	1 - 9
Saskatchewan	01 - 54
Manitoba	01 - 35
	(NXO)
Ontario	01 - 33, 40 - 43
New Brunswick	01 - 55
Nova Scotia	01 - 55
P.E.I.	01 - 55

TIRF	RANGE
Other motor vehicle	01
Animal	02
Pedestrian	03
Bicyclist	04
Farm machinery	05
Maintenance machinery	06
Construction machinery	07
Railroad train	08
Ditch Bottom/Back slope	20
Approach	21
Traffic barricade	22
Sign post	23
Traffic light standard	24
Street light standard	25
Telephone/Power pole	26
Guide rail	27
Bridge structure	28

NOTES: British Columbia combines first incident collision (their second event) for both vehicles into one.

TIRF	YEAR
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VARIABLE ACRONYM: ... (cont'd.)	FORMAT:
	Alpha
COMMON NAMES: Incident collision, collision object	2 Characters

DEFINITION:

VALUES

PROVINCE	RANGE	TIRF	RANGE
		Tree/Bush	29
		Parking Meter	30
		Building/Wall	31
		Curbing	32
		Fence	33
		Culvert	34
		Snow embankment/Drift	35
		Rock cut	36
		Delineator post	37
		Fire hydrant	38
		Median/Barrier	39
		Crash cushion	40
		Gravel pile	41
		Ran off road	50
		Overturned	51
		Fire/Explosion	52
		Submersion	53
		Skidding/Sliding	54
		Load spill	55
		Runaway on grade	56
		Traffic island	57
		Jack-knife	58
		Motorcycle	59
		Street car/trolly	60
		ATV	61
		Moped (under 50cc)	62
		Not applicable	97
		Unknown	98
		Other	99

NOTES:

TIRF

TRAFFIC INJURY RESEARCH FOUNDATION DATABASE

FIELD INFORMATION SHEET

YEAR: 1985

VARIABLE ACRONYM: VTY1, VTY2...

COMMON NAMES: Vehicle type

FORMAT: Alpha 2 Characters

DEFINITION: The functional design of the vehicle(s) involved in the traffic accident.

VALUES

PROVINCE	RANGE
British Columbia	01-70,80-87,90-94
Alberta	01 - 15
Saskatchewan	01 - 18
Manitoba	01 - 24
Ontario	01 - 99
New Brunswick	01 - 18
Nova Scotia	01 - 18
P.E.I.	01 - 18

TIRF	RANGE
Automobile	01
Bicycle	02
Bus	03
Moped	04
Motorcycle	05
Snowmobile	06
Tractor (Farm)	07
Train	08
Truck/Van	09
Tractor Trailer Truck	10
Other Vehicles	11
Offroad Vehicle	14
Pedestrian	-2
Vehicle type unknown	-1

NOTES:

TIRF		YEAR
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		FORMAT:
VARIABLE ACRONYM: OBJ1, OBJ2,...		
		Numeric
COMMON NAMES: Object identification number		2 Digits

DEFINITION: This is the number the police assign to each object involved in the accident, including pedestrians and bicycles.

VALUES

PROVINCE	RANGE	TIRF	RANGE
British Columbia	01 - 19		
bicycle	20 - 29		
pedestrian	30 - 39		
witness	90		
Alberta	01 - 99		
pedestrian	n		
Saskatchewan	01 - 99		
pedestrian	n		
Manitoba	01 - 43		
pedestrian	n		
Ontario	01 - 99		
pedestrian	00		
New Brunswick	01 - 99		
pedestrian	97		
Nova Scotia	01 - 99		
pedestrian	97		
P.E.I.	01 - 99		
pedestrian	97		

NOTES:

TIRF	YEAR
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VARIABLE ACRONYM: PSN1, PSN2,...

COMMON NAMES: Position in/on vehicle, victim position

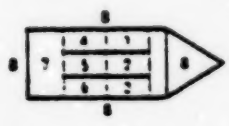
FORMAT: Numeric 1 Digit

DEFINITION: A number denoting the position of a person within or on (in the case of trucks), an accident involved vehicle. The number refers to positions designated on a plan-view outline representation of the vehicle (see diagram below). In some provinces the "persons" are victims only, but in others they may be all occupants of involved vehicles.

VALUES

PROVINCE	RANGE
British Columbia	1 - 9
Alberta	1 - 7
Saskatchewan	1 - 9
Manitoba	1 - 9
Ontario	1 - 9
New Brunswick	1 - 9
Nova Scotia	1 - 9
P.E.I.	1 - 9

TIRF	RANGE
Driver	1
Passenger	2 - 7
Riding, hanging on	8
Pedestrian	9
Unknown	0



NOTES: This variable is used to indicate victim type as well as victim identification. Alberta will require minor recodes, because they do not destinguish between passenger location.

TIRF		YEAR
TRAFFIC INJURY RESEARCH FOUNDATION DATABASE		
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FIELD INFORMATION SHEET		
		FORMAT:
VARIABLE ACRONYM: AGE1, AGE2,...		
		Numeric
COMMON NAMES: Victim age		2 Digits

DEFINITION: The age, to the next closest year, of a accident-involved victim.

VALUES

PROVINCE	RANGE	TIRF	RANGE
All:		All:	
Reported age	00 - 99	Reported age	00 - 99

NOTES:

TIRF	TRAFFIC INJURY RESEARCH FOUNDATION DATABASE	YEAR
	FIELD INFORMATION SHEET	1985

VARIABLE ACRONYM: SEX1, SEX2,...	FORMAT:
COMMON NAMES: Victim sex	Alpha 1 Character

DEFINITION: The sex of an accident involved victim.

VALUES

PROVINCE	RANGE	TIRF	RANGE
All:			
Male	M	Male	M
Female	F	Female	F
		Unknown	X
Alberta:	1 - 3	Unknown	U
Manitoba: Unknown	X		
Ontario: Unknown	U		

NOTES:

TIRF	YEAR
TRAFFIC INJURY RESEARCH FOUNDATION DATABASE	
	1985
FIELD INFORMATION SHEET	

	FORMAT:
VARIABLE ACRONYM: TOD1, TOD2,...	
	Numeric
COMMON NAMES: Time of death	2 Digits

DEFINITION: The total amount of time which has elapsed from the occurrence of the accident to expiration of the victim (cessation of the heart).

VALUES

PROVINCE	RANGE	TIRF	RANGE
		Elapsed hours (DOA, DOI, DAS, DIE)	01 - 24
		More than 24 hours - less than one week	25
		More than one week - less than one month	26
		More than one month - less than one year	27
		More than one year	28
		Unknown	99

NOTES: If victim is considered brain dead but maintained on life support for the removal of organs, death hour is the time the alcohol sample was taken. Coded at coroner's office.

TIRF		YEAR
TRAFFIC INJURY RESEARCH FOUNDATION DATABASE		
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FIELD INFORMATION SHEET		
		FORMAT:
VARIABLE ACRONYM: F1A1, F1A2, F2A1, F2A2,...		
		Numeric
COMMON NAMES: Alcohol concentration		3 Digits

DEFINITION: The results of toxicologic tests for alcohol, units are milligrammes per 100 millilitres of blood or mg%.

VALUES

PROVINCE	RANGE	TIRF	RANGE
		All:	
		Negative	000
		Result	001 - 949 mg%
		Unknown if tested	950
		Sampled, not tested	960
		Tested, no results	970
		No sample	980

NOTES: Coded at the coroner's office.

TIRF		YEAR
TRAFFIC INJURY RESEARCH FOUNDATION DATABASE		
		1985
FIELD INFORMATION SHEET		
		FORMAT:
VARIABLE ACRONYM: F1M1, F1M2, F2M1, F2M2,...		
		Alpha
COMMON NAMES: Sample medium		1 Character

DEFINITION: The sample medium taken during autopsy for alcohol analysis.

VALUES

PROVINCE	RANGE	TIRF	RANGE
		Blood	1
		Urine	2
		Viterous humor	3
		Liver	4
		Stomach contents	5
		Other	6
		No test	7
		Unknown if tested	8
		Missing	9

NOTES: Coded at the coroner's office.

TIRF

TRAFFIC INJURY RESEARCH FOUNDATION DATABASE

FIELD INFORMATION SHEET

YEAR: 1985

VARIABLE ACRONYM: F1E1, F1E2, F2E1, F2E2,...

COMMON NAMES: Sample Ante/Post expiration

FORMAT: Alpha 1 Character

DEFINITION: This variable indicates when the samples were taken, before or after the victim expired (cessation of the heart).

VALUES

PROVINCE	RANGE	TIRF	RANGE
		Ante 1 hr. or less	1
		Ante 1 to/incl 6 hrs.	2
		Ante over 6 hrs.	3
		Ante time unknown	4
		Post	5
		Unknown	6
		No test	7
		Unknown if tested	8
		Missing	9

NOTES: Coded at the coroner's office.